

ADMITTED

# Knitted Outerwear



NOV 10 1961

the official publication of the  
national knitted outerwear association  
386 park avenue south, new york 16, new york  
murray hill 3-7520

sweaters • swim suits • infantswear • knit fabrics • polo shirts • gloves • headwear

RECEIVED  
INST. OF TEXTILE  
TECHNOLOGY

Published weekly (except for a special issue in April) in New York, N. Y. Subscription price \$10 per year. Entered as Second Class Mail, June 21, 1941, at the Post Office at New York, N. Y., under the Act of March 3, 1879. Copyright 1961 by the National Knitted Outerwear Association.

30

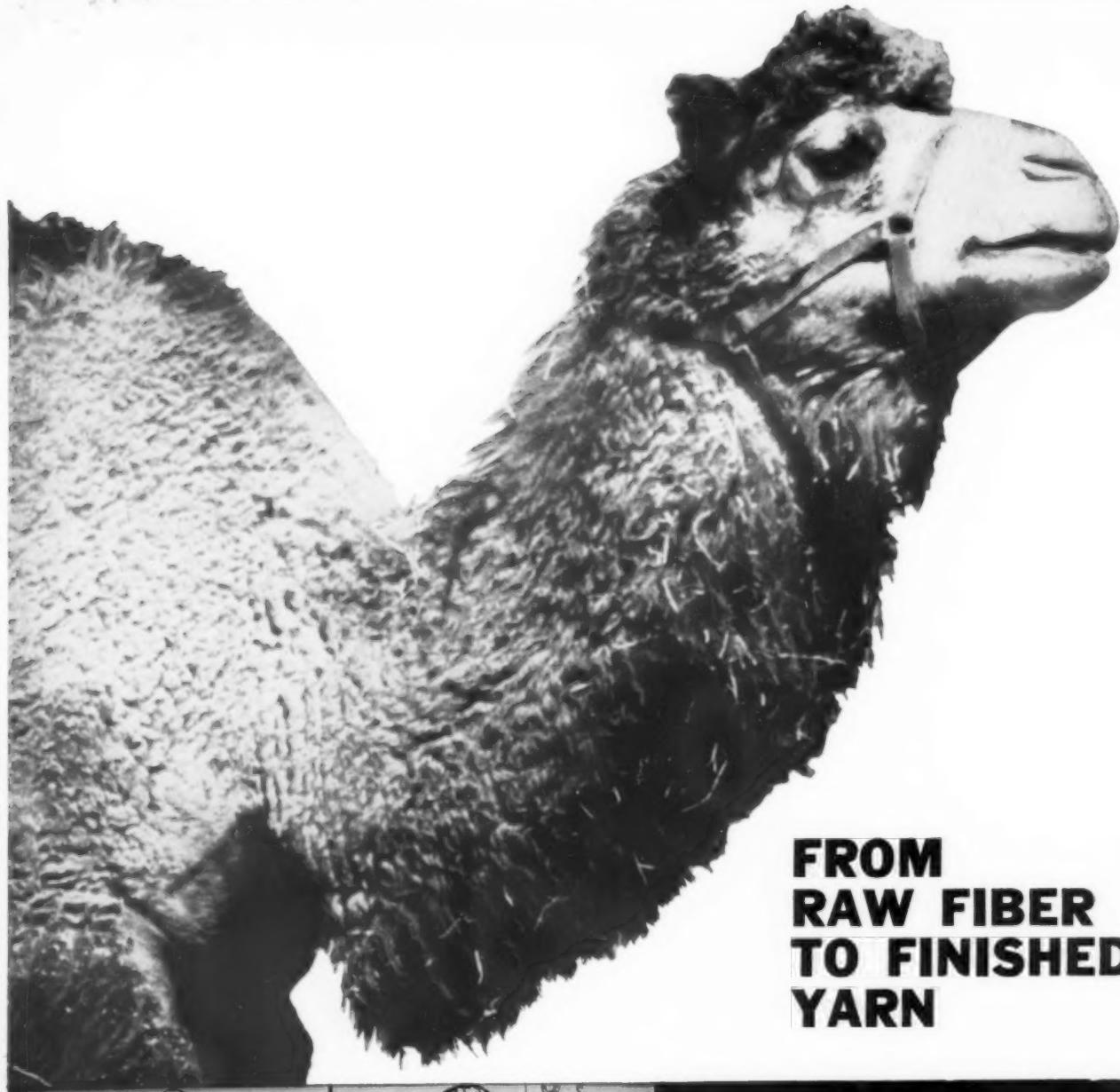
MONDAY, OCTOBER 23, 1961

NOV 10 1961

No. 4



SPECIAL ISSUE: WOOL, SPECIALTY FIBERS REVIEW



## FROM RAW FIBER TO FINISHED YARN



**WOONSOCKET**  
**SPINNING CO.**

**When you buy from Woonsocket you are buying the best!** Whether it be cashmere, camels hair, angora, fur blends, mohair, lambs wool or other specialty yarn, Woonsocket begins with the world's finest fibers. Woonsocket processes them in its own mills, under highly scientific control until the yarn is delivered promptly to your factory. Thus you are assured of an adaptable resource, able to meet the constantly changing demands of men's and women's fashions.

Distributed by **AMICALE YARNS, INC.**, 511 Fifth Ave., New York 17, Murray Hill 2-1655 • A. M. Krasnoff, 1 Belmont Ave., Bala Cynwyd, Pa., MOhawk 4-6345 • Edgar Worth, 1511 W. Florence Ave., Inglewood, Calif., ORegon 8-4293 • Textile Yarn Co., 222 W. Adams St., Chicago 6, Ill., DEarborn 2-5230 • Spun by **WOONSOCKET SPINNING CO.**, 115 Ricard St., Woonsocket, Rhode Island, POlpar 9-3100

Knitt  
Publis  
arwea  
South,  
Hill 3-  
cluding  
per year  
Canada

The Kn  
the off  
tional  
tion, is  
dissemi  
exchange  
of trad  
ment o  
try in a  
tion's b  
the pre

James H.  
Vice-Ch  
Ingraham  
Israel  
David  
Ed K.  
Irvin  
John  
Irving S

Sidney  
Executive  
National  
Harold  
Edward

Harold  
New Eng  
Edward  
Herman  
Pennsy  
H. L. A  
Western  
Edward  
Eastern  
Clevela  
Clevela

Charles  
Irving

Exc  
V  
Ma  
L  
F  
Pri  
S  
Fib  
Ch  
V  
Tec  
h  
M  
San  
T  
N  
Kin  
B

**Knitted Outerwear Times**

Published by National Knitted Outerwear Association, 386 Park Avenue South, New York 16, N. Y. Murray Hill 3-7520. Subscription Price (including the Yearbook Edition)—\$10 per year in U. S. A. \$15 per year in Canada and foreign countries.

The Knitted Outerwear Times being the official publication of the National Knitted Outerwear Association, is exclusively devoted to the dissemination of information, the exchange of opinion, the stimulation of trade, and the general improvement of the knitted outerwear industry in accordance with the Association's basic objectives as expressed in the preamble of its by-laws.

**James F. Niels, President**

**Vice-Presidents:**

Ingram Bergman

Israel Cohen

David Reithal

Ed Kalfahs

Irving Louis

John Miller

Irving Saltzman, Treasurer

**Sidney S. Korzenik**  
Executive Director and Counsel  
National Knitted Outerwear Ass'n  
Harold Korzenik, Counsel  
Edward A. Brandwein, Admin. Sec.

**Harold Linsky, Secretary**  
New England District  
**Edward B. Shils, Secretary**  
Herman Lazarus, Counsel  
Pennsylvania District  
**H. L. Ashworth, Secretary**  
Western District  
**Edward A. Brandwein, Secretary**  
Eastern District  
Cleveland District  
Cleveland, Ohio

**Charles Reichman** . . . . . Editor  
**Irving L. Silverman** . . . . . Business Mgr.

**FEATURES  
IN THIS ISSUE**

Excellent Close For Wool In '61 Foreseen	3
Market Trends Toward Luxury Animal Fibers	7
Principles of Wool Shrinkproofing	9
Fibers For Double Knits	15
Challenge Faces the Woolknit Industry	17
Technology of Circular Knit Yardgoods Manufacture	29
Same Double Knit Trends As In U. S. Noted In Manchester	35
Kirkland's DJK 36 High Speed Double Knit Machine	41

**Wool And Specialty Fibers Review****Excellent Finish For Wool In '61 Seen**

By RUTH JACKENDOFF  
Director, Department of Economics and Statistics  
The Wool Bureau, Inc.

THE GENERAL business recovery has yet to be reflected in a rise in clothing business so far in 1961 compared with a year ago. Estimated consumer clothing expenditures for the January-July period were 2 per cent off from last year. This was part of a lag in retail sales of consumer goods in contrast to continuing gains in consumer expenditures for services. Uneven weather patterns appear to be playing an increasingly important role in consumer purchasing of seasonal clothing. In their turn retailers have adopted more rigid inventory policies and are not stocking as fully in advance of new seasons as they used to in the traditional past. While this may avoid excessive markdowns, it also poses the risk of potential sales losses.

Clothing production statistics for eight months of 1961 compared with the corresponding period of 1960 reflected the dull retail situation. August statistics, however, indicated a more encouraging trend in the making, and late September reports of total weekly department sales also showed a more favorable comparison with corresponding 1960 weeks than earlier in the year.

All major items of men's clothing production declined from a year ago. Women's clothing production showed mixed trends with suits and dresses up, coats and blouses on a par, and skirts and sweaters off from last year's levels.

Wool's competitive position appears to have made marked gains this year over last in most items where fabric details are reported. Midweight suits for men made of wool fabrics were 14 per cent higher in contrast to a 28 per cent decline in those made of other fabrics. Women's wool suits were 10 per cent higher while those of other fabrics were 8 per cent under production of a year ago. Men's lightweight wool suits declined 5 per cent or only one-fifth of the 24 per cent decline in other lightweights. The one exception to these gains appears to have occurred in men's slacks production where those made of wool fell off 20 per cent compared with 9 per cent in those made of other fabrics.

The production of wool apparel fabrics for civilian markets at 136 million yards during the first half of 1961 was 10 per cent off from the corresponding volume of 1960. Reflecting the relatively poorer situation in men's clothing than in women's, the output of these fabrics for the men's wear trades fell 16 per cent while those for the women's wear trades fell only 5 per cent.

The poor first half year, however, is almost certain to be succeeded by an excellent second half year. This is indicated by a decline in the new important forecasting index, the inventory-unfilled orders ratio (computed by the Wool Bureau) reported by the Census Bureau for the second year. This ratio at the end of July 1961 was 30 per cent below its November 1960 peak and 12 per cent below a year ago when the ratio was rising and unfavorable to the outlook. In addition, deliveries of most of the 6½ million yards of military worsted fabrics in the recent procurement will have an impact in production during the next six months.

A significant development in woven wool apparel fabric production for men's wear was noted in a marked shift from woolen to worsted constructions. In the nine to 13 oz. weights of worsteds, 100 per cent wool content fabrics accounted for 89 per cent of this year's yardage in the first half, up from 81 per cent of last year's corresponding yardage. The gains for 100 per cent wool content were even more important in women's wear fabrics of woolen constructions which account for 93 per cent of women's wear woven wool fabrics. The 100 per cent wool content woolens increased seven per cent over last year's yardage.

Apparel wool consumption at the mills reflected these trends to the extent that raw wool accounted for 55 per cent of January-July 1961 total fiber consumption compared with 51 per cent of the corresponding 1960 total. In addition, wool consumption in the worsted system rose 3 per cent in January-August, while it declined in the woolen system making for a net loss of one per cent in total apparel wool consumption for the period.

Suffering both from the general lull in demand and from the re-establishment of a higher annual tariff, imports of woven wool fabrics declined 42 per cent from a year ago during January-July 1961. Owing to the penalty of a higher tariff for low-priced imports, Italian fabrics fell off 70 per cent while imports of British cloth were 31 per cent lower and of Japanese cloths, 18 per cent lower. It is likely that there will be some acceleration of imports during the remaining five months, although not enough to catch up on the 1960 annual imports. Whatever slack develops will have to be taken up by domestic wool mills, or the consumption of wool cloths represented by domestic production plus imports will have experienced a severe loss from a year ago.

**Import Rise**

Owing to a rather serious shortage of spot supplies of apparel wool, imports have recently begun to rise. During January-July 1961 apparel wool imports were 13 per cent higher than a year ago, with the accent on 60s and finer grades. These increased 22 per cent while all lower grades declined 3 per cent. This parallels mill consumption trends where 60s and finer increased nine per cent over a year ago while lower qualities were off 13 per cent. A build-up in trade stocks is looked for in the period ahead as October 1 stocks for the period estimated by The Wool Associates were 16 per cent below a year ago and equivalent to less than 20 weeks' supply at the June-

(Continued on Page 5)

Augus  
tion.Price  
medium  
market  
October  
and th  
above  
during  
Corres  
paid ty  
four p  
tive lo  
fines a  
with a  
after al  
differen  
tralian  
mestic  
five ce  
tralianDurin  
1957-6  
wool e  
yarns  
produ  
counted  
of total  
apparel  
approx  
percent  
1952-1  
new c  
cellulos  
ble 1).The  
wool ya

# WHAT DO YOU LOOK FOR IN A POUND OF YARN?

CONSISTENCY?

Represented by

James & Cheatham

Burlington, N. C.

CA 6-5591

Milton Glassenberg

222 W. Adams St.

Chicago 6, Ill.

DE 2-5230

Tempion Spinning Mills (Canada) Ltd.  
Drummondville, Que.  
GR 8-2513

Tempion

SPINNING MILLS, INC.

NATURAL FIBERS • SYNTHETICS • BLENDS

MOORESVILLE, N.C. • 1407 B'WAY, NEW YORK 18, N.Y. • LO 3-4141

Chemspun

YARNS, LTD.

August rate of wool consumption.

Prices of domestic fine and medium wools on the Boston market during the week ended October 6 were nine per cent and three per cent, respectively, above their recession low-points during the last wool season. Corresponding Australian duty-paid types at Boston were each four per cent over their respective low-points. Thus, domestic fines are now selling at a par with duty-paid Australians—after allowing for the processing differential included in Australian quotations — while domestics are still some four to five cents cheaper than Australian mediums.

### Wool Knitwear

During the past four years, 1957-60, the estimated raw wool equivalent of wool knitting yarns consumed in domestic production of knitwear accounted for 14 to 15.5 per cent of total mill consumption of raw apparel wool. These percentages approximated the corresponding percentages in the three years 1952-1954, just prior to the new competition from non-cellulosic knitting yarns (Table 1).

The domestic consumption of wool yarns in the production of

major classes of knitwear during 1960 was taken as the total production of woolen and worsted spun knitting yarn for sale (excluding carpet yarns). This total, reported at 51.1 million pounds, was one per cent under the estimated 1959 total of 51.8 million pounds. With an increase of 8 tenths of one per cent reported in the production of woolspun knitting yarn for sale during January-July 1961, compared with the corresponding 1960 period, it appears that the 1959-60 volume will be maintained this year.

In addition to the modest recovery in domestic production of wool knitwear, net imports increased steadily since the early 1950s. The raw wool equivalent of net imports increased from 2.1 million pounds in 1955 to 7.6 million in 1960, a rise of over 250 per cent. During January-May 1961, there was a further eight per cent gain in net imports over the corresponding 1960 period. (Table 2)

If the increase over 1960 of domestic consumption of wool knitting yarns for seven months and net imports of wool knit apparel for five months are each projected to the entire year 1961, the total raw wool equivalent of woolknit apparel products consumed by the consumers would be  $(38.5 + 8.2) 46.7$  million pounds, or 2 per cent higher than the 1960 total of  $(38.2 + 7.6) 45.8$  million pounds.

The most important class of woolknit products produced domestically are knit underwear, nightwear and outerwear which accounted for an estimated 29.2 million pounds, or 57 per cent of the 51.1 million pounds of wool knitting yarns consumed in 1960. Sweaters probably account for the major share of the yarns consumed in this product class.

While the production of sweaters more than doubled,

TABLE 2  
RAW WOOL EQUIVALENT OF NET IMPORTS  
OF WOOL KNIT WEARING APPAREL

	Imports	Exports	Thousand Pounds Net Imports
1950-1954			
Average	2,306	342	1,964
1955	2,424	294	2,130
1956	3,611	340	3,271
1957	3,737	271	3,466
1958	3,929	177	3,752
1959	5,782	116	5,666
1960	7,738	160	7,578
January-May 1960	1,410	32	1,378
January-May 1961	1,535	41	1,494
Average	2,306	342	1,964
% change 1960 to 1961	+9%	+28%	+8%

Source: U. S. Department of Agriculture

from over 80 million units in 1947 to over 173 million units in 1959 and slightly less (169 million) in 1960, the percentage of all wool sweaters in these totals declined from over 80 per cent to around 20 per cent. This explains the decline of wool yarns consumed in the total class knit underwear, nightwear and outerwear from around 50 million in the early fifties to around 30 million pounds recently. Domestic sweater shipments in the first eight months of 1961, declined 15 per cent and 8 per cent for men's and women's markets, respectively, (Continued on Page 81)

TABLE 1

### DOMESTIC CONSUMPTION OF YARNS, WOOL OR CHIEFLY WOOL IN PRODUCTION OF MAJOR CLASSES OF KNIT PRODUCTS, 1949-1960 MILLIONS OF POUNDS

	Knit Cloth For Sale <sup>a</sup>	Knit Underwear, Nightwear, & Outerwear <sup>a</sup>	Hand- Knitting Yarns <sup>b</sup>	Hosiery <sup>b</sup>	Seamless Knit Gloves <sup>b</sup>	Grand Total	Estimated Raw Wool Equivalent		Per Cent of Total Mill Consumption of Apparel Wool
							Amount Scoured Basis		
1949	10.3	39.2	6.0	3.7	1.6	60.8	48.5		13.9
1950	15.2	47.0	7.0	3.9	1.3	74.3	70.6		15.7
1951	11.0	53.6	3.0	4.0	1.9	73.5	52.4		13.3
1952	15.2	46.2	4.0	3.9	2.3	71.7	53.6		15.0
1953	15.1	48.4	3.7 <sup>c</sup>	3.4	1.6	72.1	58.3		15.9
1954	15.0	31.1	6.4	2.9	.8	56.2	42.5		15.5
1955	14.1	24.3	6.6 <sup>b</sup>	3.2	.8	48.9	36.9		12.8
1956	13.5	25.8	6.8 <sup>b</sup>	3.1	1.0	50.2	37.9		12.5
1957	10.3	26.1	7.1 <sup>b</sup>	3.0	1.2	47.7	36.0		14.6
1958	9.4	25.5	7.3 <sup>b</sup>	2.7	.6	44.5	33.9		15.5
1959	9.7	30.9	7.5 <sup>b</sup>	3.1	.6	51.8	39.0		14.2
1960	11.4	29.2 <sup>b</sup>	7.7 <sup>b</sup>	2.3	.5	51.1 <sup>d</sup>	38.2		15.1

<sup>a</sup> Reported by The Census Bureau.

<sup>b</sup> Estimated by The Wool Bureau.

<sup>c</sup> January-June reported figures doubled.

<sup>d</sup> Census Bureau, Spun Yarn For Sale.

**A&  
E**

*has your knitting and weaving problems well in hand*



## **A&E ANTRON\*...knit it bulky, knit it flat...but knit it!**

A&E Antron is yarn with a special sheen, a sheen that shines on your profit sheet. A&E will engineer the Antron you need for your own special purposes. See your A&E man about Antron today...and about those other fine products:

- SPUN FIBERS YARNS wools, synthetics, blends, textured yarns
- COTTON YARNS combed, carded, Durene® mercerized, Cotton Ice, dyed, bleached, gassed
- INDUSTRIAL SEWING THREAD
- CIRCULAR KNIT FINISHING

\*Texturized DuPont Nylon

**American & Efird Mills, Inc.** *Mount Holly, N. C.*

"Custom Service to the Knitting and Weaving Trades" New York Sales Office: 350 Fifth Avenue • OX 5-3977

Also: Amsterdam • Atlanta • Boston • Chattanooga • Chicago • Cleveland • Dallas • Detroit • Jenkintown • Kansas City • Los Angeles • Nashville • Philadelphia • Providence • Reading • St. Louis • Havana  
Combed • Carded • Durene® Mercerized • Dyed Yarns • Worsted • Orion • Outerwear Blends • Texturized Yarn for Ban-Lon Garments • Industrial Sewing Thread • Circular Knit Finishing

## Wool And Specialty Fibers Review

# Recent Trends In The Market For Luxury Animal Fibers

By EDWIN LANGILLE

THE greatest impact the growing knitting industry has had on the natural specialty fibers market has probably been to bring out more refinements in the handling, sorting and de-hairing methods, a greater interest in the choicer selections and greater stock piles of such rare fibers as angora, Outer Mongolian cashmere and mink which are now tapering off. Angora is currently coming from Czechoslovakia, Poland and other Central European countries in adequate quantities.

Contrary to a general impression, the specialty fibers, with the possible exception of lamb's wool, have been the least affected by the developments of the synthetics and competition is more apt to occur between one natural fiber and another.

Interest in knitting has been expanding all over the world since World War II and whenever economies recover, it follows that the markets there for finer quality increase. This has been particularly true in Japan and the Continent is now a greater market for a number of choice specialties than it ever was before.

In some instances, such as in the case of mohair, this increased demand has stimulated production but for other fibers such as angora, it has resulted in a greater absorption of their own output and for the rare types such as vicuna, alpaca and camel hair, it serves only to spread the supply that much thinner, as nothing seems to induce the raisers of these herds to greater effort. In general, however, greater usage tends to bring out more efficiency and better prices.

Biggest users of specialty fibers are, of course, the yarn spinners but vertical mills such as Bernhard Altmann, making sweaters in Texas, Hadley manufacturing in North Carolina, Dalton with knitting mills in Ohio and De Loux, of Pennsylvania are also important consumers of choice fibers. Since clipping and combing seasons rarely coincide with manufacturing schedules and since delivery facilities from distant sources are seldom ideal, the rule with us is the rarer the fiber, the greater the necessity to keep it in stock. Mills are reluctant to project themselves where specialty fibers are concerned but when an order comes in they don't want to wait for a supply to come from the Andes or the Orient, hence the specialty mar-

ket does not tend to rise and fall in seasonal peaks and valleys. Prices now are likely to have been determined by a supply situation a year or two ago and remain relatively constant over long periods.

Although it is hard to discern what knitters had to do with it, the 'fifties saw mohair crops double. Around the time of the Korean conflict, the yield in West Texas was around six or seven million pounds, whereas it is currently around twelve million and may go to thirteen or fourteen million this year. Similarly, Turkey, the second largest producer of mohair, is estimated to produce something over eighteen million pounds. This is a one year clip and prices in this market hinge on Bradford whereas all mohair consumed in this country originates in Texas but it is the foreign countries that now set the price pattern in Texas.

Since 1957, this has created a very erratic condition which increased production may stabilize. From 1957 to 1959, exports of Texas mohair to Europe, particularly Italy and France, increased substantially. Early in 1960, Japanese consumption jumped sharply. Currently, of a 12,000,000 pound clip perhaps nine million go abroad.

This world-wide demand seems to be an outgrowth of the popularity of the shaggy type sweater and through the 'fifties peoples in one market after another became more selective creating greater demand for finer mohair and more of its use for novelty. This brought about more refinement. Currently kid top is frequently blended with wool. Still most of the activity is in the adult, and the past three or four years has seen 24's fluctuate from 65¢ to \$1.05. Currently adult top 28's are valued around \$2. Kid, on the other hand, has remained fairly stable with 36's about at today's level around \$2.85 and 32's around

\$2.60. Kid 40's ranging upwards of \$3 do not create much interest among knitters.

A similar desire throughout the world for finer fibers has also enlivened the demand for alpaca but whereas the output of mohair may be around fifty or sixty millions of pounds, the production of alpaca from Peru, where the bulk of the knitters' supply originates, is around 35,000 bales, or about 7½ million pounds annually and there seems little that can be done to increase it.

Negotiations are conducted at fiesta time in November with shipping to begin in December. As most shipping goes South, there is a time lag of about six weeks before delivery so that prices established one year will be reflected in the next.

Up to a few years ago, England and the United States were the principal importers of this fiber. Now, according to the information we have here, of the latest clip as of July 31, 8,000 pounds came to the United States; 10,000 went to England and 23,000 pounds were destined for Italy. The remainder was allotted as follows: Germany, 2,000 pounds; Japan, 2,500 pounds and 2,000 pounds each to Belgium and Holland.

Prices, however, tend to remain fairly level and perhaps a little easier. White which hit \$1.90 per pound in 1957, dropped off to around \$1.10 during the 1958 recession and ranges in the neighborhood of \$1.65 today. We keep combed top on hand but mills usually take fleece and considerations for the knitters are colors, sorting and blending. White top which was particularly inactive in 1958 at \$1.95 is currently selling around \$2.50.

In the case of angora, there is no interruption in the supply but the increasing absorption by home markets in the growing countries has been a strengthening factor pricewise. This is true of Argentina and especially, Japan.

Imports to this country of the loftier handling, cashmere-like French angora were tremendous for the first six months of this year creating very high prices

which are now tapering off. Angora is currently coming from Czechoslovakia, Poland and other Central European countries in adequate quantities.

Spinners in England, Belgium and France are very active competitors in this field and although combing in France occurs four times a year, stocks must be acquired twelve months before usage here and prices set one year are reflected the next. Demand has been erratic for this fiber and prices have fluctuated over the years from highs around \$7.50 to lows in the vicinity of \$4.50.

Cashmere, like all specialty fibers, has its own unique set of conditions and problems affecting supply and distribution. Fine grades needed for knitting come from Outer Mongolia and it is necessary to trade with the Russians to get it. About two million pounds of coarser Iranian cashmere, suitable for such garments as ladies' coats is imported as against about one and one-half million pounds of Chinese Mongolian cashmere suitable for knitwear.

Two years ago, the whole of Outer Mongolia cashmere crop for delivery last summer was contracted at very high prices. This created an abnormally high basis for last season's prices but when deliveries did not materialize, Russians were left with large stocks for which, this summer they were willing to negotiate at realistic levels. Prices are now pegged at reasonable levels even for weavers, and knitters can profitably offer cashmere cardigan sweaters around \$22.95 which would be valued at \$24.95 a year or two ago. Unfortunately, because of last year's price situation, this type of sweater has not been emphasized as it might have been this season. It is likely, that cashmere will again resume its proper position in the forefront in 1962.

The situation regarding camel hair is somewhat reverse. Last year supplies were plentiful and despite heavy importations by Europe and Great Britain, the fiber became something of a

(Continued on Page 87)

# WORSTEDS

Natural and/or Dyed  
skeins or cones

Special Whites  
from specially  
selected wools

Mohair Blends  
on hand in popular sizes  
spun to your needs  
at our own mill

# ORLONS

Turbo "Fluffease"  
dyed on cones

**TURBO**  
6 Denier  
natural on  
cones or skeins

**TURBO**  
3 Denier  
natural  
on cones

All of the above yarns are available for  
IMMEDIATE DELIVERY

# DAVIS YARN CO., INC.

370 Hart St., Brooklyn 6, N. Y.

Glenmore 5-1600

*When you think of knitting yarn, think of DAVIS YARN.  
A Leading Supplier for Over 40 Years.*

**Wool Technology**

# Basic Principles Underlying Shrinkproofing Of Wool

By FRED H. STEIGER  
Personal Products Corporation  
Milltown, N. J.

WOOL is known for the texture, resilience, warmth, and wrinkle resistance which it imparts to knitted and woven fabrics and garments. These characteristics come from the elastic properties and surface properties of the wool fiber, properties which are not entirely matched by any other commercial fiber available today. With all these characteristics, wool might be the ideal fiber for many applications were it not for the ironic fact that a combination of the very properties which contribute these desirable features also produce the greatest deficiency of the wool fiber, the tendency to felt.

Wool fibers are not homogeneous throughout, but rather they are composed of a number of different layers. With respect to some of the textile properties mentioned above, the layer of most importance is the surface. This layer, called the cuticle, consists of a horny protein which covers the cylindrical wool fiber with a sheath of overlapping scales, much like the shingles on a roof. The free ends of these scales project outwards, pointing towards the tip of the hair. Therefore the surface of the fiber has a serrated profile.

Because of the scaly surface of wool, more force is required to rub a fiber against its scales than is necessary to rub with the scales. There is more friction in one direction than in the other. Scientists call this the differential friction effect.

When the fiber is rubbed by other surfaces, it encounters less resistance in moving in one direction rather than in the other. Therefore it is more likely to move in the direction of least resistance — towards its root.

This differential friction effect, together with the ability of the fibers to stretch and then recover from stretching, is what causes a wool garment to felt. When an item containing wool is subjected to cycles of tension and compression, as happens during laundering, the repeated stretching and relaxation, coupled with the differential friction effect, causes the fibers to migrate rootward. In doing so they carry with them other fibers with which they have become entangled. As a result of the repeated mechanical action, the

wet wool fibers continue to become further and further entangled until they cannot be separated in a practical way without considerable damage to the fibers. This is felting.

At one time it was believed that the wool fibers in a fabric moved because the scales acted like interlocking barbs, but now it appears that the directional friction effect is sufficient to account for the felting.

The shrinkage of garments and fabrics made of wool, however, is not due to felting alone. Besides felting there are two other classifications of shrinkage which can take place during laundering.

The first type of shrinkage is a result of the drawing, stretching, and pulling which wool undergoes during the spinning, knitting, dyeing, and other operations which are part of the production process. Unless special precautions are taken, the stretch imparted by these pulling operations may be retained by the fabric as a type of temporary set. When such a fabric is soaked in water or steamed or pressed or sponged, the set is released, and the fibers regain their unstretched length. The extent of these losses, which is known as relaxation shrinkage, rests in the hands of those who control the mechanical processes to which wool is subjected. Steaming operations such as decating or London Shrinking are the traditional methods for reducing relaxation shrinkage.

These manufacturing strains, however, are not always completely removed in the standard hot water or steam relaxation treatments. In some instances a certain amount of mechanical action is necessary to speed the relaxation process. If, because of this, the fabrics have not been fully relaxed before they are put into a laundering operation, they may shrink even though no fiber

migration, which is symptomatic of felting, occurs. Since this loss of area did not occur during the relaxation process, it is not called relaxation shrinkage. The term which is used is consolidation shrinkage.

Thus because of relaxation shrinkage and consolidation shrinkage, fabrics may be made unfeltable but not necessarily unshrinkable. Unshrinkability depends to a large extent on the structure of the fabric. Some knitted fabrics, for example, are particularly susceptible to consolidation shrinkage.

The obvious way to evaluate the performance of feltproofing finishes is to launder the treated fabrics. Many of the conditions of the test, however, may influence the results. It has been shown, for example, that increasing the concentration of detergent in the bath causes increased fabric shrinkage. A high concentration of detergent, however, is not necessarily a reliable way to accelerate all tests since it also has been reported that in a horizontal washer, where the fabrics are agitated by being dropped off the drum sides into the water, a high detergent concentration may decrease the rate of felting shrinkage because of the cushioning action of the suds.

Decreasing the pH, increasing the temperature, or increasing the time of agitation in the wash produces an increase in the extent of shrinkage. Laundering in the presence of wool ballast produces more shrinkage in a test sample than laundering in the presence of cotton ballast; a load of untreated wool will induce more felting than will a ballast load of stabilized wool.

Even the type of drying will affect the results. Tumble drying causes the greatest amount of shrinkage.

Washing a group of relaxed fabrics containing subminimal amounts of a feltproofing finish has shown that each fabric felts until it finally reaches the shrinkage found in the untreated control sample. The quantity of applied finish and the test variables such as the composition of the washing medium affect only

the rate at which the fabric shrinks. The final dimensions are not affected. On the other hand, when sufficient finish was applied, the fabric is not affected, regardless of the test conditions.

Sometimes a properly treated fabric, which has been put through a relaxation operation, will shrink during laundering. Consolidation shrinkage should then be suspected. A simple means for distinguishing consolidation shrinkage from felting shrinkage in such a case is to measure the loss of area of the relaxed fabric as a function of washing time. Felting is a progressive process which will take place over a reasonable span of time. Consolidation shrinkage, however, occurs early in the laundering period and would be revealed by the fact that no additional loss of area occurred after the shrinkage which took place during the first few minutes of the test.

Because of the influence of washing variables, standardization of test methods is vital. Such standardization has been supplied to the industry in the form of two accelerated test methods. One test for the shrinkage of wool hose is known as American Association of Textile Chemists and Colorists Tentative Test Method 73-1953 or American Standards Association No. L 14.88-1956. A standard procedure for the accelerated testing of the relaxation and felting shrinkage of other wool knit fabrics is described in American Association of Textile Chemists and Colorists Tentative Test Method 74-1953, American Standards Association No. L 14.89-1956 or American Society for Testing Materials D 1284-53.

Wool felts because of the combination of its elastic properties and its differential friction. Therefore, any treatment which affects either or both of these properties will affect the degree to which wool shrinks. By altering one or the other in the proper way, wool can be made feltproof.

There are three ways by which chemicals can reduce the differ-

(Continued on Page 11)

**WORSTED  
ZEPHYRS  
MOHAIR  
BLENDs  
SLUB YARNS**



QUALITY SPUN BY

**WALTER MARSHALL SPINNING CORP. OF R. I.**

Thornton, R. I.

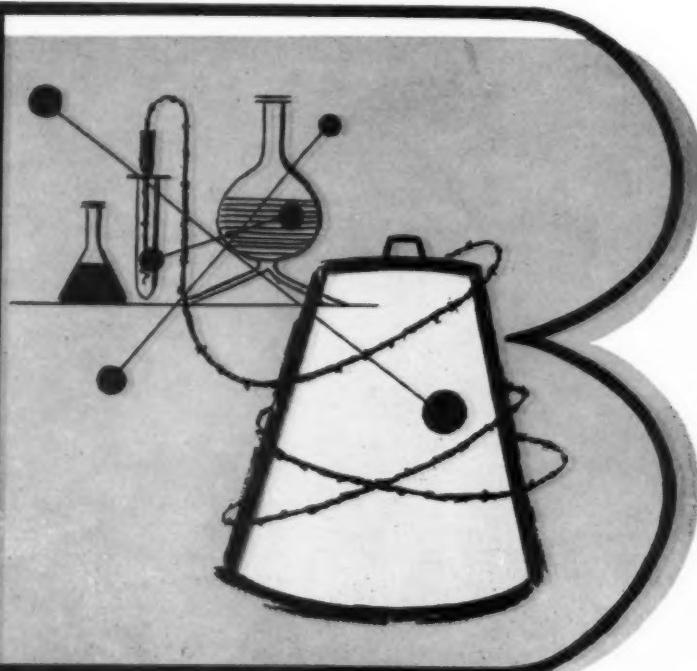
*S. Brustein*

ESTABLISHED 1910

96 Spring Street, New York 12, N. Y.

CAnal 6-7312

**ORLON® SAYELLE®  
PUFF-EE® ORLON®  
SHAG-O-LON® ORLON®  
SHAG-PACA ORLON®  
NYLON**



ential  
the fe

Firs  
can be  
leaves  
a surfa  
smoot  
the sa  
when  
along  
differen  
original  
operat

Chl  
form  
effectiv  
able  
batche  
socks.  
to yan  
are d  
haloge  
ever, a  
since  
action  
damag  
close  
with r  
tempe  
avoid  
goods.  
avoid

And  
chemic  
tial fri  
the su  
ally th  
"rough  
This is  
friction  
an ext  
ence in  
and ro  
the pr  
neglige  
treatm  
perma  
nation  
plus p  
feltpri

The  
those  
comple  
degrad  
remov  
wool.  
modify  
than to  
siderab  
these  
horny  
to che  
softer  
the pr  
occurs

The  
differe  
be elim  
scales.

ential friction and so decrease the felting of wool.

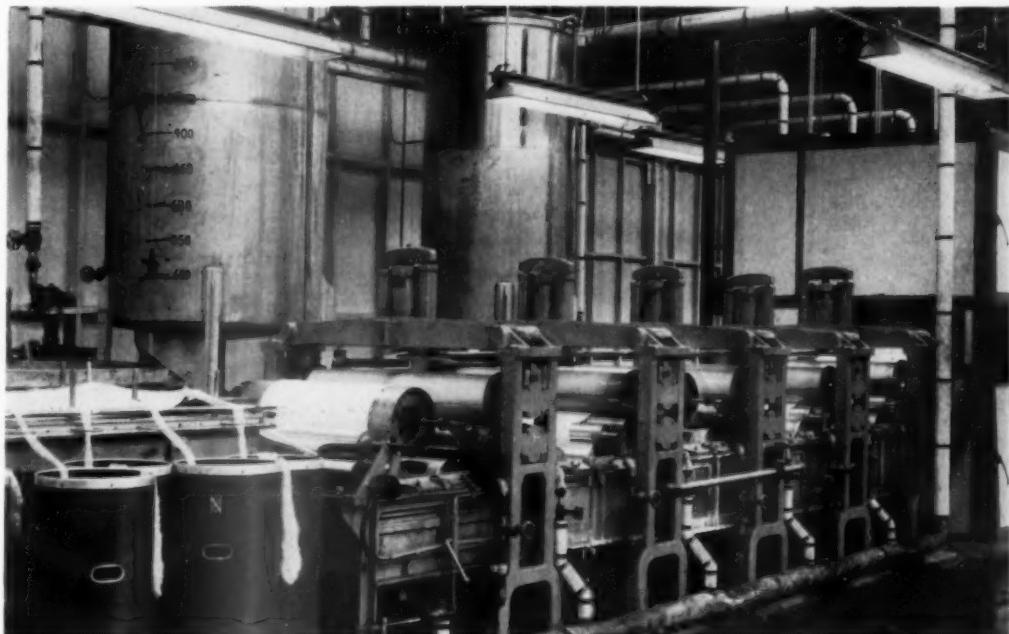
First, the scales of the fibers can be completely removed. This leaves the individual fibers with a surface which, whether it be smooth or rough, would have the same coefficient of friction when rubbed in either direction along the fiber. In this way the differential is eliminated. The original chlorination processes operated by this mechanism.

Chlorination in its simplest form is low in cost and quite effective. It, moreover, is suitable for application to large batches of small items, such as socks. It can even be applied to yarns before knitting. These are desirable attributes. Such halogenation treatments, however, also have their drawbacks since they involve chemical reactions which are potentially damaging to the fiber. Therefore close control must be exercised with regard to time in the bath, temperature, chemical concentration, and pH in order to avoid yellowing or degrading the goods. Control also is needed to avoid dyeing difficulties.

Another means by which chemicals can alter the differential friction of wool is modifying the surface of the fibers. Generally this takes the form of a "roughening" of the surface. This increases the coefficient of friction in each direction to such an extent that the slight difference in friction between tipward and rootward movement due to the presence of the scales is negligible. Certain chlorination treatments, alcoholic alkali, acid permanganate, and the combination of alkaline hypochlorite plus permanganate are said to feltproof wool in this way.

These treatments, as well as those which remove the scales completely, are classed as being degradative in nature since they remove some fraction of the wool. Even if the intent is to modify the fiber surfaces rather than to destroy the scales, considerable care is required with these chemicals because the horny scales are more resistant to chemical attack than is the softer interior of the fiber. In the process some loss of weight occurs.

The third way by which the differential friction effect can be eliminated is by masking the scales. Degradative treatments



**FLEISSNER** five-bowl backwasher used in the Dylan continuous process for producing shrink resistant wool tops

generally will not accomplish this. What is needed is a class of chemicals which can be deposited on the surface of the wool fiber. These finishes fill in the depressions between scales and coat the fibers so that the friction in both directions is essentially that of a film of the finish.

Addition copolymers based on acrylic or vinyl esters, styrene, or butadiene have been used in this type of treatment. These finishes do not decrease fabric weight as the degradative processes do. Finished goods weight actually is increased. Also these thermoplastic polymers produce no fiber damage and have little effect on dye shades. The hand of the treated fabric depends on the composition of the polymer; "soft" polymers have little influence on hand. "Harder" addition polymers can be used to give body to an otherwise limp fabric.

Some of the earliest rubbery polymers which were used for wool stabilization became hard or discolored on exposure to heat or light. This deficiency, however, was due to the composition of particular polymers and is not a general fault of the entire group.

There are fewer chemical types available to the finishers who choose to feltproof their fabrics by changing the elastic properties of the fibers rather

than the differential friction. Finishing procedures which alter the resilience by crosslinking the wool fiber or by depositing a polymer inside the fiber structure have been proposed but are not yet commercially accepted. Only the "spot welding" mechanism, which gives the apparent effect of modifying the elastic properties of the fibers by immobilizing them in the fabric system, has been employed on a large scale.

Melamine-formaldehyde resins are associated with the "spot welding" mechanism although other thermosetting resins as well as some thermoplastic polymers have been reported to operate in this way. Like the chemicals which mask scales, "spot welding" finishes increase fabric weight without fiber damage.

The greatest drawback to the use of these finishes on knit goods is the fact that they can not be applied to the yarn. Thus, while they may be used on piece goods such as jerseys, application to individual socks, sweaters, or the like on a production basis is not practical. One such finish was applied to individual socks during the war, but peace time economics militate against this procedure. Another drawback to the use of melamine-formaldehyde resins and other thermosetting finishes is the necessity to give the fabric a peroxide pretreatment or a high

temperature cure. Either procedure can be costly; the latter also may yellow the goods. Loss of a wool-like hand due to fiber bonding by high add-ons of thermosetting resin also is a problem.

It should be understood that some materials which have been mentioned may operate through more than one feltproofing mechanism. The finish may do two things at once, such as the simultaneous scale masking and "spot welding" of some of the addition polymers, or the finish may work through one mechanism or the other according to the conditions, such as the scale removal or surface modification which chlorination procedures produce at different pH values.

Thus it is apparent that a variety of chemical procedures based on a number of mechanisms are available to the finisher who wishes to prevent his woolen goods from felting. An understanding of the properties of these finishes and the mechanisms by which they work should enable the finisher to make the most appropriate choice for his particular situation. A feltproofing treatment together with proper attention for those mechanical operations which are responsible for relaxation or consolidation shrinkage can lead to woolen garments that are completely shrinkproof.

*when* DYED *by* ROYAL

*your*

**SINGLE & PLIED YARN FOR  
DOUBLE KNITS, WORSTED,  
FUR & MOHAIR BLENDS**

*achieve*

*new beauty of color*

*new brilliance of shade*

*new ultra-soft loftiness*



# ROYAL

THE FIRST NAME IN DYEING

.....and the trade's  
foremost WOOL  
yarn and fabric  
dyer!



---

### ROYAL YARN DYEING CORP.

SKEIN DYERS AND BLEACHERS  
OF WOOLEN, WORSTED, ORLON  
SPECIALTY FIBER AND BLEND YARNS

---

### ROYAL PACKAGE DYEING CORP.

PACKAGE DYERS OF ORLON SAYELLE,  
ALL DENIER ORLON, DACRON, ALL MAN-MADE  
FIBERS, SINGLE & PLIED YARNS FOR DOUBLE KNITS,  
WORSTED, FUR AND MOHAIR BLENDS

---

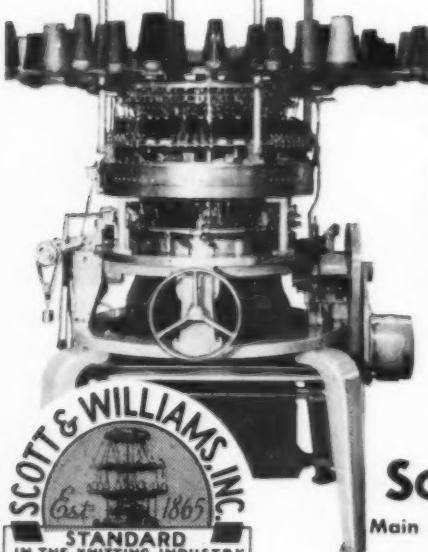
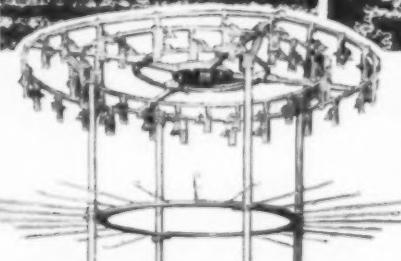
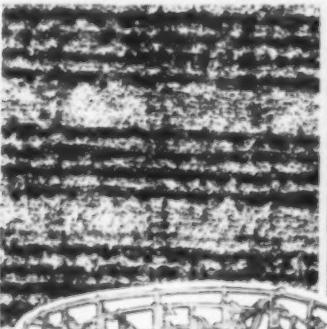
### ROYAL KNIT GOODS DYEING CO., INC.

SWEATER DYERS AND KNITTED FABRIC DYERS  
OF ORLON, TEXTURED NYLON  
DACRON, OTHER SYNTHETICS AND FUR BLENDS

---

340 MORGAN AVE., BROOKLYN 11, N.Y.

EVergreen 7-9000



# LPW

**LOMBARDI WRAP MACHINE**

*For Fabrics  
like none that  
have been  
knitted before*

Unlimited in Design,  
Color and Textures

Represents a radical departure from  
existing techniques for incorporating  
both "Sculptured" and/or smooth de-  
sign effects in Jersey fabric.

**WITHOUT ANY CHANGE OF  
THE KNITTING MECHANISM**

will produce innumerable types of fab-  
rics: — Suiting, Swimwear, Upholstery,  
etc.

Unusual effects may be obtained with  
Metallic, Knop, Slub, Mohair and Che-  
mille yarns.

Patterns — up, down and across.

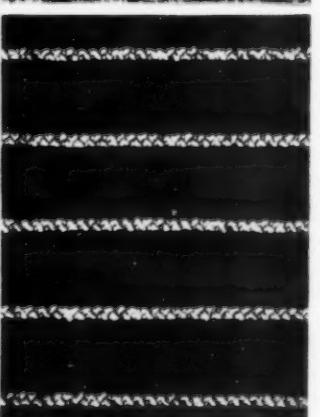
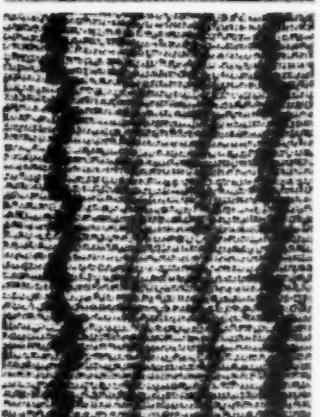
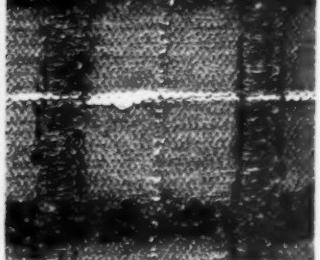
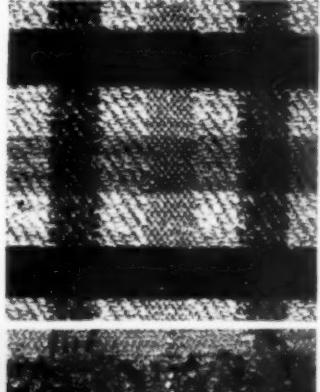
MANUFACTURED,  
SOLD AND SERVICED BY

**SCOTT & WILLIAMS, INC.**

Main Offices and Plants: LACONIA, NEW HAMPSHIRE

Sales Offices: Empire State Building, New York 1, N.Y.

Divisional Offices  
High Point, N.C. — Rossville, Ga.



OCTO

Kni  
W

AN  
knitti  
abroad  
preser  
fabric  
Acrila  
100 p  
with c  
ous U  
yarns  
Helan  
appro

Wo  
ufact  
fabri  
essed  
wool,  
going  
prefer  
in suc  
fine q  
ported  
Italian  
done o  
worste  
French  
yarns  
packag  
are dy

The  
count  
machin  
count  
roughly  
ever,  
may  
double  
18-cut  
sizes  
w.c. o  
the p  
desired

Cot  
are en  
knit fa  
mer g  
fall an  
Because  
structi  
quality

SUG

Machin  
Cut

16

16

16

18

18

18

18

\* Incl

\*\* Fab

**Knitting Yarns**

# Wool, Cotton, Synthetic Fiber Yarns For Double Knits

ANY type of natural or synthetic fiber yarn may be used in the knitting of double jersey fabrics. Most double knit cloth produced abroad and the overwhelming proportion of this type of fabric presently being knitted in this country is of wool. However, the fabric structure can be suitably knitted with cotton or with Orlon, Acilan, Creslan and Zefran in 100 per cent form or in blends with cotton or wool. The various textured nylon filament yarns—Textralized (Ban-Lon), Helanca, Agilon, etc.—are also appropriate for double knits.

**Worsted Yarns**—In the manufacture of wool double knit fabrics, quality spun yarns processed from the better grades of wool, starting with 60/62s and going up as high as 80s, are preferred. The yarns are handled in such a way as to duplicate the fine qualities possessed by imported French, Belgian and Italian yarns. Processing may be done on any of the conventional worsted systems—Bradford, French or American. The wool yarns may be either stock or package dyed; most, however, are dyed via the package route.

The most popular wool yarn count for a 16-cut double jersey machine is 1/27 w.c. This count yields a fabric weighing roughly 15-15½ ounces. However, wool yarns up to 1/30 w.c. may be employed on 16-cut double jersey equipment. On an 18-cut machine the wool yarn sizes may be 1/32 w.c., 1/34 w.c. or 1/36 w.c., depending on the per ounce yield of fabric desired.

**Cotton Yarns**—Cotton yarns are eminently suited to double knit fabrics for lightweight summer garments or even heavier fall and winter dresses and suits. Because the double knit construction is associated with high quality fabrics, combed cotton

yarns are favored over carded or double carded yarns. The combed cotton yarns may or may not be mercerized, depending upon the type of hand desired in the fabric.

A variety of cotton yarn sizes are applicable to 16 and 18 cut double jersey machines. Quality houses use 40/2 c.c. yarns on 16 cut units and 50/2 c.c. and even 60/2 c.c. yarns on 18 cut equipment. A 40/2 c.c. yarn on a double knit machine with 16 x 16 needles in dial and cylinder would yield a 14-15½ ounce fabric. Many mills, however, use coarser count cotton yarns. These may be 18/1 c.c. on 16 cut machinery and may range from 20/1 c.c. to 26/1 c.c. on 18 cut knitters.

**Synthetic Fiber Yarns**—Man-made fiber yarns are ideal for double knit fabrics. Aside from lower cost as compared to wool yarns, they endow the fabrics with wash-and-wear properties.

Orlon yarns for double jersey fabrics may be divided into three classes—yarns processed of 100 per cent Type 42 Orlon; blends of 80 per cent Orlon and 20 per cent wool; and blends of 80 per cent Orlon and 20 per cent cotton.

These yarns are not the same as the Type 42 Orlon yarns presently being used in the manufacture of conventional jersey (single needle) dress and suiting fabrics. The DuPont acrylic component of the latter usually consists of a combination of

4.5-denier high shrinkage fiber and 3-denier low shrinkage fiber. In the double jersey Orlon yarns the high shrinkage fiber has been eliminated. However, the yarns predominantly remain a blend of 4.5 and 3-denier normal shrinkage fiber, although in some cases, they may be produced entirely from 4.5 low shrinkage fiber.

Processing of the fully relaxed 100 per cent Orlon or 80/20 Orlon and wool blend yarns is carried out on either the Turbo tow-to-top system or the Pacific Converter. Most spinners appear to favor the Turbo route. After emergence from the Turbo stapler, the Orlon sliver is relaxed in the fiber setter. If it is to be blended with wool, it is then intimately combined with the natural fiber in the initial blending operations. In spinning, the yarns are held together with a somewhat higher twist than the high-bulk 100 per cent Orlon and 80/20 Orlon and wool yarns used in single needle jersey fabrics.

Sizes into which the yarns are being processed are, of course, in the fine count range, extending from 1/26s w.c. to 1/36s w.c.

Generally, in all-Orlon or Orlon and wool yarns the preferred sizes are 1/30 for 16 cut double knit machines and 1/32 for 18 cut machine. The former yields a 14 to 14½ ounce fabric; latter a 13 to 13½ ounce cloth.

Knitting proceeds from dyed rather than undyed yarn. Grey yarn is appropriate for single needle jersey fabrics which are generally dyed in the piece.

Either the package or tow/top

dyeing methods may be used for coloring 100 per cent Orlon or 80/20 Orlon and wool relaxed yarns for double jerseys. Some claim has been made that greater yarn uniformity and color levelness is obtained via the latter alternatives, which involves dyeing the Orlon component in tow form and the wool in top form and then blending the two. However, there is no reason why satisfactorily dyed yarns should not emerge from package dyeing equipment.

Double jersey yarns of 80 per cent Orlon and 20 per cent cotton are processed on cotton system equipment from either 4.5 denier Orlon or a blend of 4.5 and 3-denier DuPont acrylic fiber with a good grade of 1½ inch combed cotton. As in the case of the Orlon and wool combination, the acrylic fiber component in this blend is fully relaxed; no high shrinkage fiber is used. The yarns are spun in sizes of about 20/1 c.c. having 16 turns per inch Z twist. Knitting is done from packaged dye yarns.

Acilan yarns for double knits are also produced from non-high-bulk fiber, with spinning on the worsted system. Varying deniers have been employed on these yarns with fiber processing being done via either the Turbo or Pacific Converter routes. When handled through the Turbo system, the fibers are fully relaxed. Fabrics knitted from Converter-processed fiber tend to be somewhat coarser than those based on Turbo-processed fiber.

Texturized filament yarns of the bulk or stretch type are also  
(Continued on Page 84)

## SUGGESTED COUNTS OF WOOL, COTTON, SYNTHETIC FIBER YARNS FOR DOUBLE KNIT FABRICS

Machine Cut	Cotton	Fabric Yield	Wool	Fabric Yield	Orlon Orlon/Wool	Fabric Yield	Acrilan	Fabric Yield	Textured* Yarns	Fabric** Yield
16	40/2	14-15½ oz	1/27	15-15½ oz	1/30	14-14½ oz	1/30	14-14½ oz		
16				1/28	14½-15 oz					
16				1/30	14-14½ oz					
18	50/2	12½-14 oz	1/32	13-13½ oz	1/32	13-13½ oz			70/2	9½-11½ oz
18	60/2	12½-14 oz	1/34	12-13 oz.			1/30	13-13½ oz		
18			1/36	12-13 oz.					100/2	14, 15, 16 oz

\* Includes Textralized (Ban-Lon), Helanca, Agilon, etc. Sizes are same for all machine cuts.

\*\* Fabric yields depend on finishing techniques employed.

Acrylic, Polyester, You Name It!... for procedures and products best suited  
for your needs, Geigy has the "know-how". Should you have any questions concerning dyeing any fiber... call Geigy.

**Geigy Dyesstuffs**



Fringing  
multi-color  
knittee

**Wool Developments**

# Great Challenge Faces The Wool Knitwear Industry

By MORTON H. DARMAN  
President, Woolknit Associates, Inc.

BY THE very fact of its vigorous growth in recent years, the wool knitwear industry is being faced with a tremendous challenge. Based on its five-year retail volume record, can it maintain the pace that has resulted in greater increases than any other area of the ready-to-wear field? Or are woolknits headed toward the saturation point? Progressive knitters feel confident that the industry can cope with this challenge. Retailers believe that the popularity of woolknits is not just a temporary fashion fad. These fashions have earned a permanent, important wardrobe niche because of their supreme adaptability to every phase of American life. Retailers' reports on volume sales every month of the year confirm the all-season adaptability of knitted wools.

Continued creativity in the production of new styles, textures and patterns has kept the high-fashion appeal of woolknits at a constant peak. The double-knit wool fabric is a graphic example of the new influences spurring the demand for woolknits. Double-knits have opened up a new market in women's wear with their great versatility of design, accentuated with richness and fluidity that has stimulated a growing demand for the future. With their ease of cutting and handling, these fabrics have become



MORTON H. DARMAN

integrated into the dress industry. A study of recent fall fabric business reveals that the greatest volume of re-orders has been on double-knit wools.

Creativity plus cooperative effort are the elements that make a continuing contribution to the woolknit success story. The program of Woolknit Associates, dedicated to the mutual benefit of the entire industry, is a powerful force behind the sustained woolknit growth.

The longest established wool promotion group in existence, Woolknit Associates was formed 22 years ago when a group of spinners and dyers voluntarily banded together and joined forces with knitters. The purpose was to organize a unified promotional program for boosting volume sales of American knitted wools. A close liaison with every segment of the trade and the guidance of experts in every category are the keys to the campaign's strength. Industry leaders throughout the country serve on the board of directors, and advisory committees of retailers and knitters contribute their experience and talents to formulate and direct the program.

The group's campaign for 1961-62 has been substantially expanded, its day-in, day-out

promotion activities studded with special services that will have an inspirational impact on every phase of the producing-buying-selling cycle. Among them are:

**Fashion Color Forecast** — Woolknit's annual color forecast is being issued again this fall, forecasting colors for '62, to give knitters maximum planning time, taking full cognizance of the lengthy production cycle required. Because of the meticulous technique employed in scientific and interpretive research here and abroad, a solid reputation for accuracy has been established ever since they began their color forecast service many years ago.

**Retail Buyers' Guide** — The second edition of the Retail Buyers' Guide on wool knitwear resources is now being compiled, and will include a supplement on firms that regularly feature special groups of double knits and wool jerseys. The book is being developed with the guidance of a resource committee of retail buyers.

**Women's Sweater Preview** — After special knitter-buyer forums that offer a unique round-table opportunity for the interchange of ideas, the Association will schedule the annual rack-show preview of women's fall sweaters in March '62, repeating similar successful past events. At the suggestion of retailers, special appointments will be made for entire retail staffs or branch managers, with one store or one resident office invited at a time to inspect the collection. This early preview enables resident offices to report on the complete picture of the industry's sweater collection for fall to their stores at early April meetings. Knitters feel that because of its early timing this preview results in more volume sales on sweater buying than any presentation staged for the ready-to-wear industry.

**Campaigns on Special Events** — In line with the retail report of woolknit volume sales every month, with May cited as one of the biggest selling periods, the woolknit campaign will be developed into one of continuous year-round performance. Instead



Glitter teams with wool in an elegant evening knit by Arbe. Black and white sequins in a diamond pattern design the sleeveless cashmere overblouse which teams with a slim, side slit skirt of Lebanon all-wool jersey.

of concentrating on fall, the schedule will be evenly spaced to include special events during the resort, late spring, summer and holiday seasons.

The calendar includes: (1) "Virile and violent colors" on woolknit coordinates for resort; (2) hooded woolknits for beachwear (resort); (3) seat-cover sweaters for spring; (4) Easter knits a special children's story; (5) mother-ing in wools for Mother's Day; (6) "travel-here-and-home," promoting woolknit dresses and costumes in May; (7) "summer is a wool swim-suit."

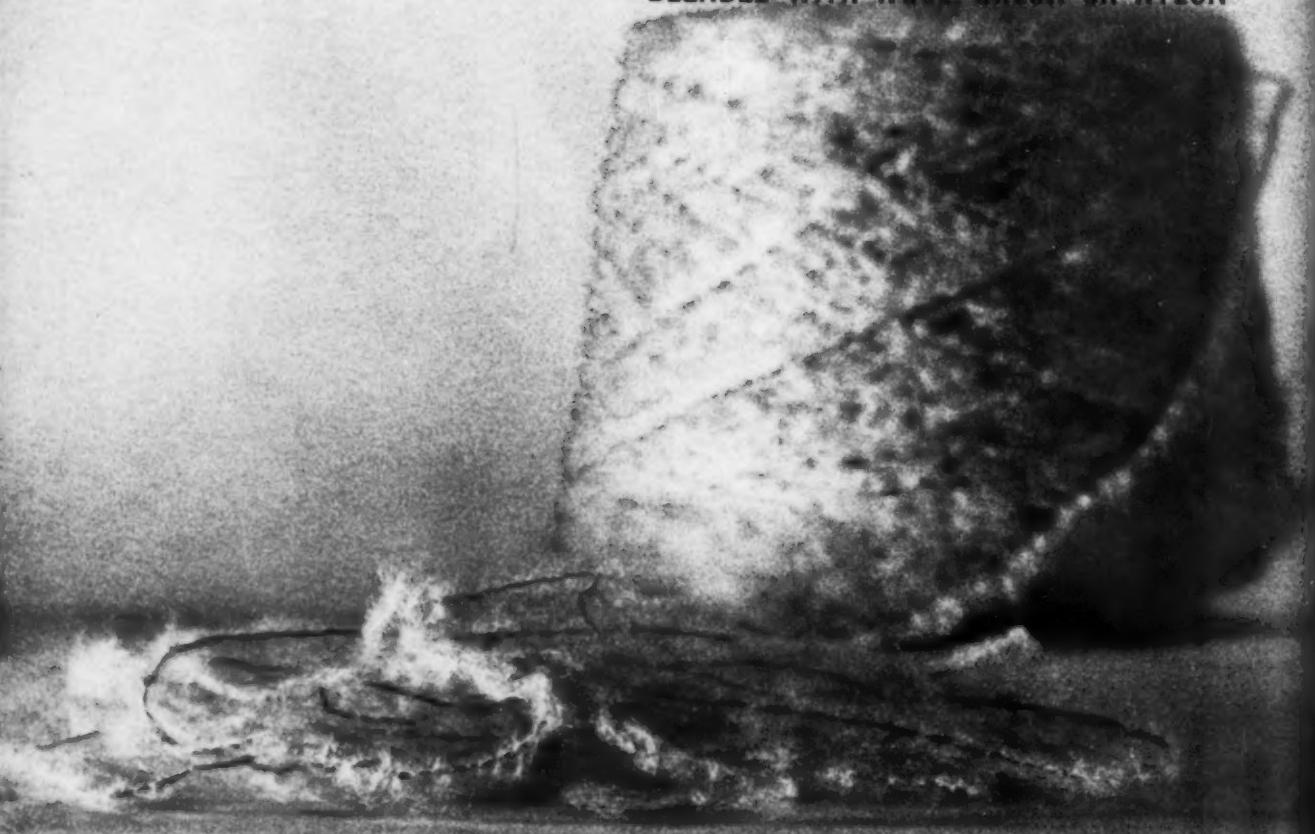
**Woolknit Fact Cards** — The American Wool Council plans to distribute woolknit fact cards to retail selling personnel. Produced in the handy size of playing cards, they will contain answers to questions that invariably crop up in sportswear departments. They will contain answers to questions that have been determined through a survey of knitwear experts and buyers in resident offices.



Fringing edges the hemline of a multi-color stripe long-line bulky knit in giant vertical ribs.

# THE NEWEST MOST EXCITING ITALIAN FASHION SINCE THE FLAT KNIT

A YARN WITH A LUXURIOUS LOOK  
AND A DELIGHTFUL FEATHERWEIGHT  
TEXTURE. . . . IN BRUSHED MOHAIR  
BLENDED WITH WOOL, ORLON OR NYLON



INTRODUCED BY

THE LISTRADA DIVISION OF THE TWISTEX COMPANY, INC. / NOVACK & KIVIAT, INC. / NOVELTY YARNS & SPUN BLENDS  
MILL AND GENERAL OFFICES: 432 EAST 102nd STREET, NEW YORK 29, N.Y. • SALES OFFICE: 24 WEST 40th STREET, NEW YORK 12, N.Y. • EN 9-2500

OCTO

Wom

Me

THI  
widene  
metalliMet  
out th  
appear  
skirts  
pants.  
flected  
trimme  
dresses  
quard  
designsAfte  
technic  
hand-so  
sweater  
served  
make a  
sales foSom  
sweate  
were su  
ing fro  
dering  
of a r  
ever,  
prepar  
ods of  
these c  
printed  
of wo  
opening  
sportsw  
Some P  
washin  
others s  
it is im  
manencA hand  
cities is  
and fu  
Contrast  
collarles

**Women's And Misses' Woolknits****Metallic, Hand-Screened Prints Enliven Spring Knits**

By ELEANOR KAIRALLA  
Woolknit Associates, Inc.

THE dress-up scope of women's woolknits has been impressively widened for holiday and resort through the expanding use of metallics and colorful hand-screened prints.

Metallic threads shimmer in small decorative notes or throughout the fabric of dresses, costumes and sweaters. They also appear in dramatic evening skirts and tapered at-home pants. The sparkle trend is reflected in the many metallic trimmed collars and bandings on dresses either in abstract jacquard patterns or in medallion designs.

After overcoming some early technical difficulties during the hand-screening process, printed sweaters are playing a well-deserved popularity role, and will make a lively impact in volume sales for the coming season.

Some of the first printed wool sweaters introduced two years ago were subject to fading and crocking from dry-cleaning or laundering and textures were often of a rather stiff quality. However, improved techniques in preparation of colors and methods of application have removed these original obstacles, and the printed sweater is a rising star of wool-sweatering fashion, opening up a new area for sportswear and festive costumes. Some knitters recommend either washing or dry cleaning, but others specify only washing since it is impossible to guarantee permanence of color in patterns if



A hand-blocked print of tiny flowerettes is applied to Premier's wool and fur blend cropped cardigan. Contrast color binding frames the collarless neckline and front placket.

the sweater is subjected to the many different strong chemicals being used.

The fashion advantage of these prints over the knit-in jacquard patterns are many. A wide variety of delicate designs can be achieved; a more extensive assortment of colors can be reproduced with artistic clarity and design can be applied on finer-weight garments.

Jacquards, which are limited in the number of colors in any one design, are much bulkier and

heavier fabrics because of their two-needle bed type construction. A dainty overall wild flower design with contrast trim is one of the outstanding new examples of the amazing detail that can be obtained in a pattern through the hand-screened technique.

Mohair and wool blends, both looped, plus the cut-and-brushed types, are very much in the upcoming knit fashion picture. Chanel-type cape jackets in the looped mohair and wool, sometimes decorated with embroidered motifs, have expanded the sweater's social life with their smart theater and party-going manners. The handknit look of lacy crocheted stitches is another important contributor to the more dressed-up woolknit theme.

**Men's Woolknits****Light To Mid-Weight Bulkies In Self-Patterns Replace Heavier Sweaters**

The hefty, brawny look has taken a back seat in men's wool sweater fashion, displaced by the light, mid-weights and the textured knits in self-patterns. This trend away from the massive bulkies reported by Woolknit Associates Inc., has already had a promising effect on the expansion of the wool sweater buying season this spring.

Although there has been spotty spring sales volume on men's wool sweaters on the West Coast, this was the first time that there had been any marked retail interest in wool among Eastern stores during this season. This spring activity is a significant forerunner of a growing sales potential that will add still greater impetus to the pace of the men's knitted wool market, which boomed in volume by 100 per cent in the past five years.

For fall, fine gauge lamb's wool is the leading volume fiber in men's knitwear, with brushed wool and mohair in second place and the mid-weight ski type jacquard sweater, third. Wool sweaters in light, aerated links and links stitches are assessed by several leading manufacturers

as the biggest up-and-coming influence in the men's sweater industry. One house reports the purchase of four new links and links knitting machines, kept in around-the-clock performance to meet the demand. Textures contribute to the airiness of the lighter weight knits, in flat cables, accordian ribs and lacy rib stitches. Patterns are bold and colorful in flat and brushed knits, in argyle, Scandinavian, Navajo, abstract and striped designs.

Cardigans lead in styling, with the ratio over pullovers estimated from 3-2 to 4-1. The six- or seven-button cardigan is the preferred model and the zippered closings with cadet collars have been in good demand. Top-rated pullover neckline is the seven-inch "V." While sleeveless vests and pullovers are classified as last in popularity, they are reported to be climbing substantially in sales over last year.

In the color realm, a lighter olive shade such as sage green is the top volume seller, followed by the blues, grays, bone and naturals. In the larger metropolitan areas, black for holiday cruisewear and spring.



A classic all-wool cardigan by Old Colony takes on novelty proportion with the application of a brilliant, hand-screened floral pattern.

The color story for resort and spring mingles the softened mood of pastels with the bright shades, stressing the apricot to coral shades, the pinks, yellows, greens, caramel, bone and many blues, from pale to bright navies.

The prophetic styling that has lifted woolknits into top fashion prominence is reflected in the new silhouettes of mobile skirts that are flared, flounced or pleated; the princess lines; and the supple, flowing ease of dresses and costumes, even in slinky evening-length skirts with a single one-sided slit.



Bright nosegays are applied to a Chanel-type jacket by Park Storyk knitted in a lacy wool and mohair blend.



**WORSTED-ZEPHYR  
SPECIALTY YARNS  
SPECIALTY FIBERS  
AND BLENDS**

Natural, Heathers  
and Slubdyed Colors

**MAINE SPINNING CO.**

SKOWHEGAN, MAINE

**AMES TEXTILE CORP.**

LOWELL, MASS.—CLEVELAND, GA.

New York Office  
112 West 34th St.  
New York 1, N. Y.  
CHickering 4-4100

New England Office  
222 Summer St.  
Boston, Mass.  
HUBbard 2-0069

Southern Office  
Cleveland, Georgia  
UNion 5-2161

Yarn Conversion Chart Available Upon Request

**Woolknit Fashions****New Knits Noted For Jacquards, Intarsias And Prints**

This skating outfit by Banff left, teams a bulky, ribbed wool slipon having stand-up ringed collar with a tasseled stocking cap. Sweater is long-length for extra warmth. Right, cable stripes in thick and thin tweed wool yarn design another long slipon with turtleneck, Peter Freund.



Broad, twin jacquard panels knitted in a two-tone intay effect design the front of this bulky slipon by Sidney Gould. Collar tucks inside for a crew neck effect.

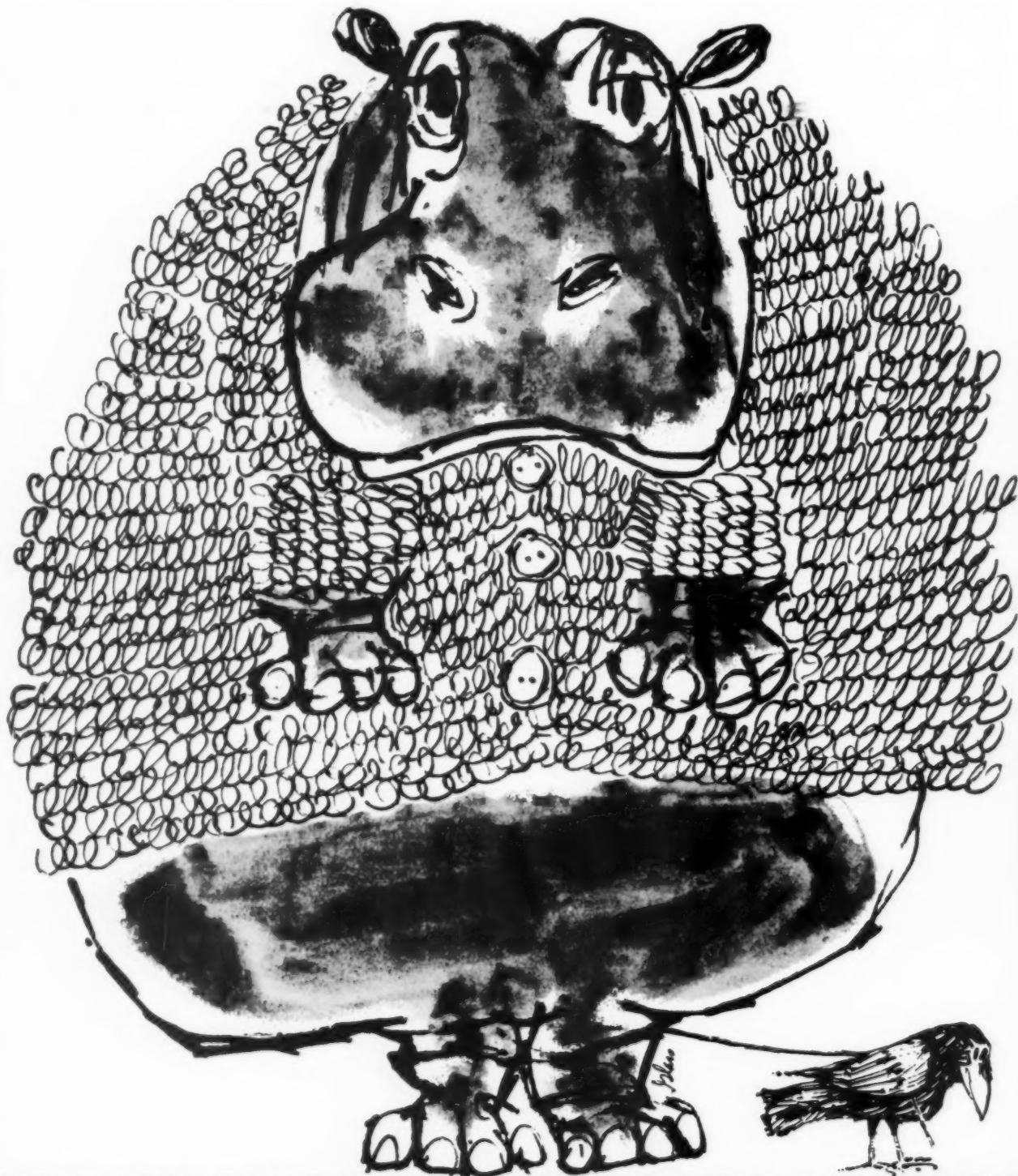
Coordinates in solid and swirl floral print pique double knit wool are by Catalina. Included are a Chanel-type jacket, slim skirt and printed sleeveless overblouse; a sleeveless shift dress softly bloused and tied with a self sash, and long sleeve buttoned jacket and tapered Capri pants both in the printed knit.



Wavy intarsia is inlaid in an elegant color pattern across the front of a wool and fur blend cardigan by Garland, left. The long-line buttonless tunic by Geist & Geist, right, can be worn sash belted or in loose clutch style. Open textured knit yoke, cuffs and border contrast with flat jersey stitch.



Photos courtesy, Woolknit Associates, Inc.



## GLEN RAVEN HAS THE MOST SUPER BULK IN CAPTIVITY

Glen Super Bulk is the newest yarn from Glen Raven. It is a superior hi-bulk yarn made by a special  
Glen Raven process from DU PONT'S high-shrinkage ORLON\* with a count up to 1/37.5 and ply.

For further information: R. SIDNEY FLOOD, GLEN RAVEN MILLS, INC., 1430 BROADWAY, NEW YORK 18, LO 4-8866  
MOHER ASSOCIATES, 44 Washington Street, Wellesley Hills, Mass. (Cleveland, Ohio and New England)/SWIRLES & CO., 3222 Sunset Blvd., L.A., California (for West Coast)  
RUSSELL GANT CO., Burlington, N.C. (for South)

\*DuPont's Acrylic Fiber

**Woolknit Fashions****Men's Semi-Bulky Sweaters Become More Highly Styled**

Cable stitching stripes the front of a double-breasted cardigan with a new notched collar, left. Novel in every way is the boat-neck poncho right, ribbed and boldly striped with jagged hem. Drummond.

Triangular suede patches at the shoulder underscore the raglan sleeves of this bulky rib V-neck by Himalaya, left. Miniature cable stripes run up the front of a ski sweater by Puritan, right. A column of center ribbing is bisected by the zipper that extends to a snug turtleneck.



Two pullovers by Jantzen, 1961 Woolknit Design Award winner, are a crew-neck semi-bulky with multi-color spaced horizontal striping and a bateau neck, brushed wool and mohair patterned in a giant paisley.



New York Knitting Mills, another 1961 Woolknit Design Award winner, offers two V-neck, six-button cardigans. Left, links and links with diamond design and right, argyle panels bisected by slanting pockets.



Contrast color outlines the new cadet collar and zipper placket of Hanes' medium weight bulky. It is knitted in a lacy rib stitch that gives the appearance of airy bulk. Right, a zip front cardigan by Revere is knitted in a pineapple stitch and is detailed with contrast color stripes.

Photos courtesy, Woolknit Associates, Inc.

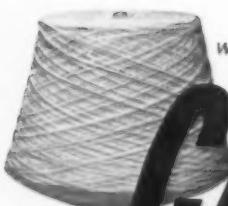




SINCE 1916 OUTSTANDING  
IN WORSTED YARNS . . .  
NOW ALSO LEADERS  
IN SYNTHETICS

# if WOOL were invented today...

. . . the horns would blow and the cymbals clang indeed. For here is the miracle fiber of the ages . . . with all the wondrous characteristics human beings strive to put into man-made fibers, and more! Run down the checklist of features our man sees in the daydream illustrated here. What test-tube could ever achieve so much? No wonder synthetics can never hope to replace the basic qualities of wool, *nature's own miracle fiber!* P.S. For your own wool needs, we suggest you look to Caron, where we specialize in sheep-to-knitter controlled quality always!



WORSTED • ORLON • NYLON • ACRILAN • ALPACA • DYNEL • DACRON • MOHAIR • Yarn for BAN-LON® Garments

# CARON

*spinning company*

ROCHELLE, ILLINOIS • ROBESONIA, PA. • NEW YORK CITY

**Wool And Specialty Fibers**

# Wool, Angora, Mohair, Fur Blends In Jantzen Fall Line

By VIRGINIA CORNING

**P**ORTLAND, Ore. — Wools and specialty fibers—angora, mohair, fur mixtures—are prevalent in the Jantzen fall sweater line for women—and these natural fibers accommodate both the textured and the flat trend in current knitwear fashion, with seemingly endless variety. As Jantzen point out, it's never possible to say that wool is making a comeback in either men's or women's lines by Jantzen and other Pacific Northwest manufacturers—for actually it has never been away.

Westeners are devoted to this traditionally western fiber with its warmth, resilient texture, and versatility—its indoor and outdoor adaptability to weather changes.

Particularly outstanding in Jantzen sweaters are the numerous tweeds, many of them with conspicuous nubbed or thick-and-thin effects and often featuring a white fleck. They are found in both men's and women's lines. Fashion colors contribute a new freshness and femininity to tweeds in the women's sportswear line, though the more conventional neutrals are equally present.

In menswear, colorful picture



Thick and thin tweed yarn imparts dimension to Jantzen's all wool pull-over. White trims ribbing on the V-neck, cuffs and lower edge.

shag of wool and mohair—with geometric, Scandinavian, giant paisley and other designs—have had a big share in the fall fashion spotlight, as have other very decorative and pictorial motifs in the bulkies and flatter knits.

In the women's line, softness and fluffiness of texture—the fluffed look—are expressed in what Jantzen's merchandising program calls cuddle-ups and purr blends. Brushed effects, while somewhat less important than a few seasons back, still have considerable impact on the teen wearer. Coordinating skirts and pants may employ angora or mohair for added textural qualities and novelty interest.

One of the more unusual items in the roster of natural fibers is baby llama, mixed with 60 per cent lamb's wool, and contributing the prestige that attaches to things thought of as rare and hard-to-get.

For the classic collegiate look, the firm has teamed Shetland-mix sweaters with skirts and tapers of a wool-and-mohair mist tweed pullover and cardigan in an all-over abstract pattern include 20 per cent pure Shetland wool in their all-wool fabric.

A skirt-and-cardigan combination blends wool with 12 per cent silk in a nub tweed in taupe mist shade.

Still following the textural highroad is the array of tweeds in bolder colors and textures. The thick-and-thins display a generous proportion of white, mingled with such colors as kumquat orange, taupe mist, teal mist, and black. Other two-tone worsted tweeds in the Jantzen line include mixes such as cyclamen pink with black, gold with kumquat orange, royal with teal mist, and beige with taupe mist. Skirts and tapers in variety match or blend with



A two-tone all wool tweed slip-on is styled along middy lines. This textured, bulky long length slip-on is worn with a pleated flannel skirt and a flat knit sweater underneath.



Solid color knit outlines collarless neckline and placket standing in contrast to the thick and thin tweed yarn used for this zipper cardigan worn with coordinated wool slacks.

the many sweaters in these all-wool tweeds. Included in thick two-tone tweed group is a hooded pullover in over-hip length. The worsted yarns are Jantzen's own—done with the chenille look.

Patterned sweaters, for after-ski wear, contrast the glamor of metallics with the comfortable textures of wool. The Snow Crystal pullover displays a single huge and beautifully detailed snowflake design, in two colors plus Lurex, on the front of a solid-color worsted pullover. Backgrounds are spruce blue or white, with gold Lurex; bois de rose or ming turquoise, with silver. The metallic element is also worked into the top of the sweater.

A sunburst-design jacquard in 89 per cent wool, 11 per cent metallic provides a sleeveless tunic which can be pulled in at will with a slim, soft natural leather belt to provide gentle flare over the hips. This pattern—midnight sun enclosed in blocks—is matchmated in the men's line. There are two multi-color combinations—one gold, one with silver.

Jacquards include raised Hellenica floral patterns on a wool-knit background.

Jantzen's Lombardi ma-

ches are responsible for some of the elaborate designs used in this 1961 fall line.

Also in all-wool worsted are two different patterns in Jantzen's Swizzle—a popover style boatneck sweater with a row of fringe at the bottom. In the Cross Stitch version, this sweater was worn officially by the influential college board of the Meier and Frank department stores here. Another version is the wide zig-zag stripe. The zig-zag combinations are kumquat orange with henna red, and royal with billiard green—while the cross stitch design is in black on cyclamen pink or gold.

Wool with Acrlan makes up Jantzen's popular Janessa mixture, used for many Venetian flat knits—sweaters, sweater leggings, sweater skirts. Flat-knit pullovers provide the fashionable layered look when worn beneath cardigans of tweed and other sweaters of the bulkier knits.

The layered look is facilitated this fall by slightly higher-necked pullovers, to show above V-necks and other lower necklines. While the two sweaters may match, they often gain a

(Continued on Page 84)



**Choicest WOOLS and SPECIALTY FIBERS of the World**

**"The Mill With a Feeling for Fibers"**

**THE ALDON SPINNING MILLS CORPORATION**

**For discriminating knitters who demand perfection**



**THE ALDON SPINNING MILLS CORPORATION**

Talcottville, Conn.



*Represented by:*

Merritt Company  
40 E. 34 St.  
New York 16, N. Y.

Moher Associates  
44 Washington St.  
Wellesley Hills 81, Mass.

C. J. McAlaine  
One Highland Ave.  
Bala-Cynwyd, Pa.

Wood & MacDougall, Inc.  
P. O. Box 982  
Charlotte 1, N. Carolina

OCTOBER 23, 1961

27

**Dyeing & Finishing**

# Franklin Process Expands Facilities At Two Plants

FRANKLIN PROCESS CO., division of Indian Head Mills, has just put the finishing touches on a comprehensive expansion and improvement program that has resulted in the addition of a total of 40,000 square feet in two of its southern plants. The company is a leading package dyer of single worsted yarns for double knits as well as single and two-ply sweater and jersey yarns of wool, combed and carded cotton and all spun synthetics, including Type 42 high-bulk Orlon and Orlon Sayelle. In package dyeing, Franklin utilizes a distinctive compressible spring.

**Footage Added**

Under the recently completed plant expansion program, a 10,000 square foot dye house has been added to the Fingerville, S. C., plant, and a 30,000 square foot wing has been added to the Greenville, S. C., facility.

The addition of a dye house to the Fingerville installation gives this plant greater versatility. Up to now, it had been operated as a spinning mill, turning out single carded cotton yarn, and as a bleachery.

The new dye Fingerville house has an ultimate capacity of 50,000 pounds a week. It has been equipped with six stainless steel dyeing machines ranging in capacity from 300 pounds to 22,000 pounds. The bleachery also contains three package dyeing machines capable of handling 100,000 pounds of yarn a week. The Fingerville unit thus has a total weekly capacity of 150,000 pounds.

The wing was added to the Greenville, S. C., plant to accom-

modate relocation of winding equipment from the company's closed Philadelphia plant. The mill's winding capacity balances with that of the dye house which had a rated output of 200,000 pounds weekly.

More efficient operation of the dyeing facilities at the Greenville plant and improved quality of dyeings are assured as a result of the installation of automatic controls on all dyeing machines in the unit.

**Laboratories**

The Greenville plant, which is a pivot unit in the Franklin Process complex, houses both a pilot dyeing laboratory and an applications laboratory. The pilot unit is the first step before production dyeing is undertaken and is designed to assure that yarns handled in the plant will be in accordance with customers' specifications as to shade, fastness and similar factors. The aim of the applications laboratory is to conduct research and development on new fibers and methods of dyeing.

In addition to the plants at Fingerville and Greenville, Franklin Process also has a dye plant in Chattanooga, Tenn. This facility has a rate of capacity of 200,000 pounds weekly.



Carrier loaded with finished dye lot is lifted from dyeing machine at Franklin Process' Greenville facility. Carrier holds 850 pounds of yarn or 600 packages. View of natural yarn before dyeing is in foreground.

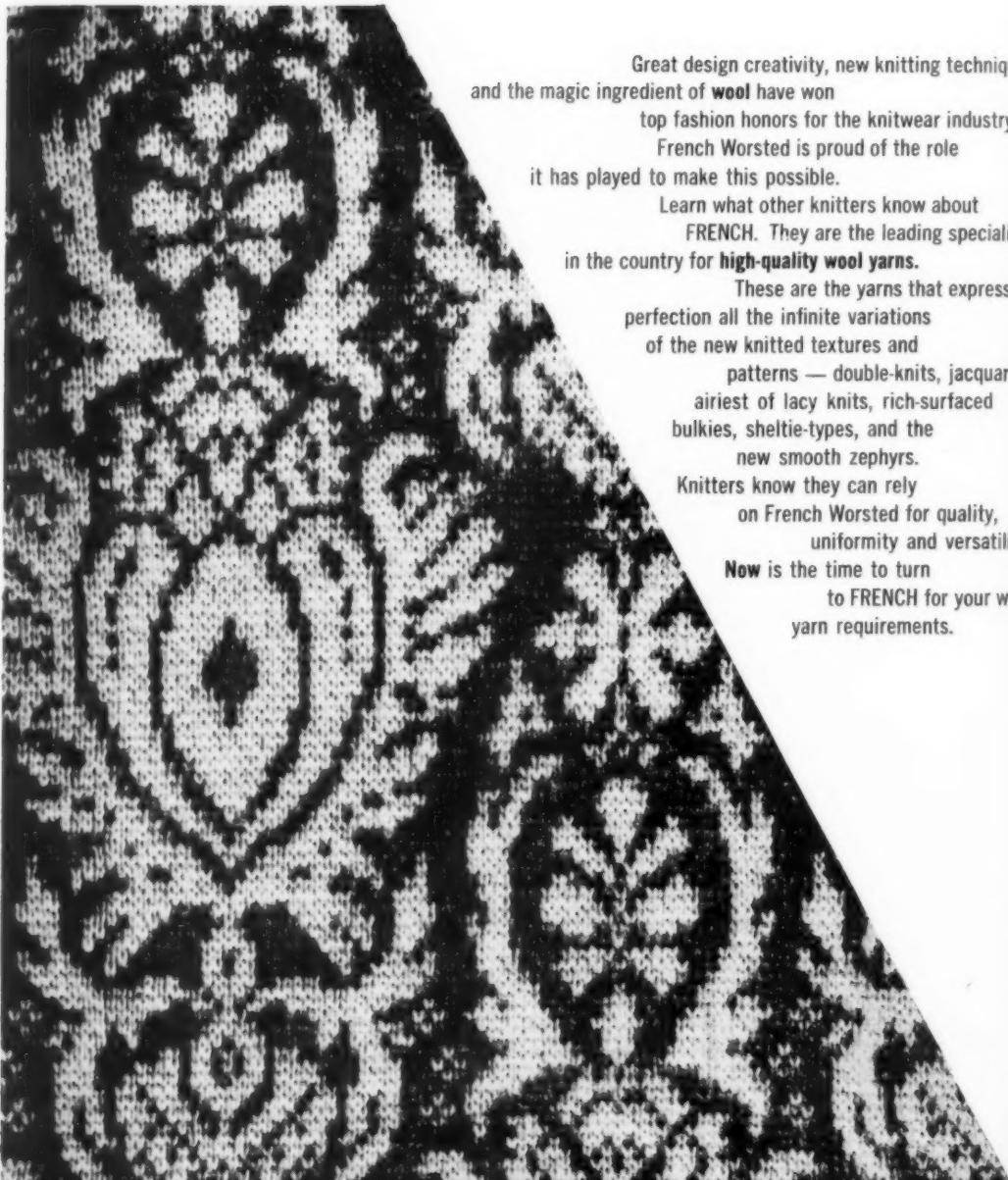


One of the largest capacity package dyeing machines in service in the industry is at the Greenville installation of Franklin Process Co. The unit holds 1,500 packages of yarn.



Expanded extracting and drying capacity at the Greenville, S. C., plant of Franklin Process Co. Doors operating by remote control lead into new plant addition where dried dyed yarn is coned.

# ALL'S WOOL THAT WEARS WELL



*Selling Representatives*

L. R. MICHELSON  
The Irving Cohen Yarn Corp.  
130 Palmetto St.  
Brooklyn, N. Y.  
Hyacinth 1-1600

BARNEY KRON  
Harry Schwartz Yarn  
Company, Inc.  
868 Traction Ave.  
Los Angeles 13, Calif.  
Madison 4-7644

Export Agent  
FRED F. BIEL  
F. W. Biol Corp.  
129 Pearl St., N. Y. 5  
Bowling Green 9-4571  
Cable: EFBIELUS



Established in 1906

THE *French* WORSTED COMPANY  
and Dauray Textiles Division

Great design creativity, new knitting techniques  
and the magic ingredient of **wool** have won

top fashion honors for the knitwear industry.

French Worsted is proud of the role  
it has played to make this possible.

Learn what other knitters know about  
**FRENCH**. They are the leading specialists  
in the country for **high-quality wool yarns**.

These are the yarns that express to  
perfection all the infinite variations  
of the new knitted textures and  
patterns — double-knits, jacquards,  
airiest of lacy knits, rich-surfaced  
bulkies, sheltie-types, and the  
new smooth zephyrs.

Knitters know they can rely  
on French Worsted for quality,  
uniformity and versatility.

Now is the time to turn  
to **FRENCH** for your wool  
yarn requirements.

OCT  
Int  
Te

The vast  
atten  
than this  
to co  
outer  
any produ  
are a  
mach  
State  
I ear  
paper  
value  
to off  
of th  
in th  
of h  
brand  
partic  
I spe  
comin  
I sha  
vant  
ties b  
when  
chine  
techn  
comp  
be ta  
opini  
perso  
ion.

For  
vide  
eral  
have  
one o  
as fol

1.  
of ne  
(a)

(b)  
(c)  
(d)

2.

need  
(a)  
(b)  
(c)  
(d)

I h  
equip  
being  
ductio  
still la  
ment-

Fin  
chines  
ficatio

**International Federation Of Knitting Specialists Parley****Technology Of Circular Knitted Yardgoods Manufacture**

By JOSEPH RAB  
Director, Fabric Development  
Catalina, Inc.

THE TECHNOLOGY of circular yardgoods manufacture is so vast a subject that one cannot do it justice in all its phases. I shall attempt a classification relying almost solely on machine type rather than the end-product, hoping thereby to offer a rounded picture of this important section of the knitting industry. Moreover, I intend to confine all my remarks to the outerwear section and leave out any reference to warp knitting production, even though there are a few circular warp knitting machines in operation in the States. One further observation: I earnestly believe that for a paper of this kind to be of any value whatever it must attempt to offer some sort of perspective of the subject as a whole. Being in the rather fortunate position of having some idea of this branch of production in Europe, particularly in England, where I spent over a decade before coming to the United States, I shall attempt to point out relevant similarities or dissimilarities between the two continents when speaking of individual machine types or manufacturing techniques. Naturally, these comparisons and contrasts may be taken only as one person's opinion or, to be truthful, one person's highly prejudiced opinion.

For convenience, I have divided my subject into two general machinery groups, and have further subdivided each one of these groups into four, as follows:

1. Machines with a single set of needles:
  - (a) Fine cut spring needle machines.
  - (b) Loop wheel machines.
  - (c) Sinker top machines.
  - (d) Sliver knitting machines.
2. Machines with two sets of needles:
  - (a) Bulky knit machines.
  - (b) Interlock machines.
  - (c) Fancy rib machines.
  - (d) Double jersey machines.

I have left out links-and-links equipment since, although it is being used for yardgoods production on a limited scale, it is still largely regarded as a garment-length operation.

**Fine Cut Spring Needle Machines**—Machines in this classification embrace in effect but

one type of machine, generally known as the Wildman Type FBSS. This machine was evolved before the war in cuts up to 32 needles per inch and was intended specifically for filament yarns, which in those days meant just viscose rayon and acetate. The main construction for which this machine became known initially, both in the U.S. and Britain, was weft knitted locknit, a cross-tuck fabric with alternate plain jersey courses, demonstrating a considerable resistance to laddering and competing directly with warp knitted locknit construction (or tricot, as it is commonly known in the U.S.).

It is interesting to note that this type of machine is still very common in the U.S. today and that one of its principal fabrics is identical in construction with the old weft knit locknit except that today fine cotton, often mercerized, is used instead of rayon filament, and the end product is usually men's knitted shirts rather than women's garments. It is further interesting to note that this new-found popularity for an old knitted construction owes much to a single imported article—the well-known Lacoste shirt imported from France. This single garment has had a decisive influence on the whole American knitted shirt industry, so much so that the construction once known as weft knitted locknit is now most commonly referred to as the Lacoste stitch in American knitting circles.

The present distribution of fine cut spring needles machines of the Wildman type is not as widespread as that of other yardgoods equipment, being principally confined to a small number of relatively large manufacturers. The great majority of machines of this type encountered comprise 28 needles per inch. Filament yarns are still

widely employed on these machines, nylon, in both textured and untextured varieties, being a particular favorite. Many brushed nylon fabrics have been produced on these machines in recent years, used for dresses, robes and sleepwear.

Though not the fastest producing knitting machine in existence, the fine cut spring needle machine has easily managed to hold its own to date, the main reason probably being that no other weft knitting model has yet approached it in fineness of construction.

**Loop Wheel Machines**—The machines are well known both in Britain and on the European Continent, where they are almost invariably referred to as English loop wheel machines, differentiating them from the French or sinker wheel type. There can be no doubt, however, that this type of machine has achieved far greater use in the U.S. than in any other country in recent years. Two fairly similar makes of loop wheel machines are available on the American market, namely the Tompkins and Crane models, which, for the purpose of the present discussion, will be classed as one.

Employing bearded needles, loop wheel machines have been available in very fine cuts for many years now. In the early days of the jersey industry in the U.S., these machines played a vital part in the production of fine gauge high quality wool jersey, often employing two-ply yarns. This is now almost, but not altogether, a forgotten art, the great bulk of jersey production nowadays being safely in the region of multi-feed latch needle machines, as will be made apparent later. As a plain jersey producer, the loop wheel machine is necessarily considered inefficient, comprising as it usually does no more than eight feeding stations. Yet, for the production of certain other knitted constructions, the machine may not be regarded as obsolete by any means.

One of the principal basic structures for which the loop wheel machine is admirably suited is the tie-in fleecy em-

ploying a ground yarn, a tie-in yarn, and an inlaid face yarn which does not stab through, much less show, at the back of the fabric. For many years now, this basic type of inlay construction formed the basis of a whole section of the American knitted yardgoods industry devoted to heavy knitted suitings for women, overcoatings for both women and men, and a great variety of warm linings. While there were only a few firms involved in this activity, their turnover ran well into the millions of dollars, and as recently as four or five years ago, certain types of knitted overcoatings were considered as among the most popular fabrics in the country. These were generally fairly heavy constructions, running to well over 16 ounces per square yard. Many had a cotton back and were sold at extremely competitive prices.

Today, while heavy inlay fabrics produced on loop wheel machines, such as imitation astrakhan, are not altogether obsolete, they are generally regarded as having had their heyday, though who is to say what the dictates of fashion may be in a year or two? In the meantime, however, a new and important use has been found for existing loop wheel machines in the production of high-pile fabrics. As will be stated later, the principal, and best quality, high-pile knitted constructions are obtained from specially devised sliver knitting machines, but a host of other knitted high-piles are being produced on other modified machines not employing the sliver principle. Among these, loop-wheel models are perhaps the most important. The basic construction in this instance is again genuine fleece, complete with tie-in yarn. The face yarn is usually Orlon or Acrilan, this being laid-in on top of the fabric face and subsequently napped, sheared, and

(Continued on Page 31)

# some Wool-meant



You don't have to keep your ear very close to the ground to get the word about the biggest fiber news of all. It's WOOL all the way, with everyone, from manufacturer, to retailer to consumer. It's WOOL, older than history, always newer than tomorrow, in its unfailing, unchanging supremacy. . . .

Take this wool-meant advice and rely on genuine, wonderful wool. Let Bonte supply your wool yarn needs for Shetland-types, wool bulkies, mohair blends. Bonte's bonus service originates and confines exclusive colors to major mills.

# Advice



## Bonte

SPINNING CO., INC.

P.O. BOX 711 • FAIRMOUNT STREET • WOONSOCKET, RHODE ISLAND

N. Y. OFFICE: M. H. PENNEWELL — MURRAY HILL 3-8981

often, though not always, polished. At first, fabrics of this kind were used almost exclusively as winter linings, for which they were admirably suitable, combining warmth retention with relatively low weight. Later, as the high-pile market became more competitive, and as the know-how in this particular section increased, many inlay-type high-pile fabrics were used as "shells," too, directly competing with sliver-type high-pile cloths. Fabrics of this type were employed not only in full and three-quarter length women's overcoats but also in highly styled "sweater-type" garments which were the rage a year or two ago.

Even so, there can be no doubt that the great bulk of production on loop wheel machines in the past five years at least was in connection with relatively old equipment. There has been no sign of any enthusiasm on the part of American yardgoods producers to re-equip with this type of machine to any great extent, the reasons given for this attitude varying from one manufacturer to the other. It is hardly surprising that the machine builders did not look on this development with equanimity, and within the past two years at least two new developments were announced in relation to loop wheel equipment in the hope of revitalizing this section of the industry. First was the introduction of a sliver knitting loop wheel model complete with carding units, capable of knitting sliver-type high-pile constructions similar to those produced on latch needle models. Second was the introduction of large diameter models expressly for the knitting of full-width floor covering fabrics and backing scrims including paper fabrics which are rapidly coming into vogue in this part of the trade.

**Latch Needle Sinker Top Machines**—These units comprise by far the most important group in American knitted yardgoods production. They include plain and fancy, invariably pattern wheel, models and are responsible for the great bulk of production in this whole section.

The key word in discussing the various models in this subgroup is "multi-feed." These machines comprise larger num-

bers of feeds than the ones previously described. In fact, they comprise more feeds per diametral inch than any other type of machine in existence. It need not be assumed necessarily that Americans have a monopoly on multi-feed machine construction or design. Work carried out in this field in England, for example, as long back as two or three decades ago dispels this notion. I do believe, however, that very few people abroad realize the role which multi-feed sinker top machines play in the American knitwear industry as a whole.

Fabric spirality is a subject with which we are all familiar. We all agree it is a bad feature common to all circular knitted fabrics and that its detrimental effect is directly proportional to the number of feeds per diametral inch of the machine. Not unnaturally, however, there is a wide difference of opinion as to the point to which an increase in the number of feeds may be carried without undue ill effects.

In an article in the Proceedings section, Journal of the Textile Institute, for December 1960, the problem of multi-feed machines is discussed at some length and a mathematical expression is sought for the limit to which one may go in increasing the number of feeds on a circular machine before the machine will seize up through high friction between needle and cam. The conclusion reached includes the following statement: "... on a machine fitted with traditional stitch cam mechanisms, the maximum possible feeds per inch diameter of machine for a 20 n.p.i. machine would be  $20\pi/30 = 2$  feeds per 1 inch of machine diameter. In other words, many machines (e.g. Supreme) have already reached the limit in the number of feeds, and no further increases are possible in this direction using conventional cam tracks." Yet it is a fact that for about a decade now a very common American model (i.e. Supreme) has been readily available and widely used comprising about four feeds per diametral inch in a variety of diameter sizes and gauges, including 20 n.p.i. One of the most common machines for knitting cotton jersey comprises 96 feeds in a 24 or 26 inch diameter. I would be the last one to extol the virtues of the fabrics produced by this

machine, but it is a very infrequent occurrence for any of them to seize up because of frictional forces during the normal 24-hour working day.

The principal use of the 96-feed machine is for striped cotton jersey, where the large number of feeds is conducive not only to high productivity but also to a three-inch-deep pattern repeat without the use of strippers. Furthermore, it is often assumed, almost as often erroneously, that poor knitting quality can be successfully disguised in certain striped fabrics, since they tend to break up the surface of the fabric. In the finishing operation, these fabrics are stripe-matched; i.e., they are split open and the edges sewn back together after the stripes have been matched, thus eliminating the spiral drop.

Whereas 96-feed models are often considered unsuitable for the production of good quality jersey fabrics, 64-feed models are not. In fact, this is the universal type of plain machine used here for the production of wool as well as cotton jersey fabrics, almost to the exclusion of all others. The most common cuts in this instance are 16, 18, and 20, though 18 is probably the most commonly encountered. The common diameter size is 24 or 26 inches, and the common wool yarn 1/24 or 1/26. A 64-feed machine will result in a production of some 2,000 yards of jersey in 24 hours. There are hundreds of machines of this type in production in the U.S. grinding out many millions of dollars' worth of wool, 80/20 Orlon/wool, and cotton plain jersey fabrics.

In spite of the phenomenal rise of double jersey fabrics in the American market in the past couple of years, jersey fabrics of the common type have not suffered as yet any setback. In fact, it seems almost certain that the present season is the best plain wool and Orlon/wool jersey has ever had. There is perhaps no undue confidence about the future in this branch, most manufacturers admitting the potential danger from double jersey, but the recent demand for foam-backed jersey fabrics is hoped to sustain the market for quite a few seasons yet, and as regards cost, there is full confidence that double jersey will

never be able to come anywhere close to plain jersey fabrics in any given category.

By far the most important patterning machine in the U.S. market is the pattern wheel sinker top type, many hundreds of which are in operation throughout the country (and, the machine-builders like to add, in some 60 foreign lands as well). The pattern wheels operate on a three-position (knit-tuck-miss) basis, giving rise to myriads of different designs each season. Machines in this category are usually encountered in 10 to 20 n.p.i., the coarser models usually being employed for wool or wool-blend fancies and the great majority of the latter for cotton fancies.

One of the most fascinating, as well as most important, sections of the American knitted yardgoods industry is that devoted to fancy cottons. The total volume of fancy knitted cottons sold here each season is in excess of 50 million dollars, and although there are many small companies in this business, the largest one is responsible for over half that figure alone. It may be termed an all-American section insofar as it has no real equal abroad; in fact, there are a few companies in this business in other countries, but usually they have some connection with leading American cotton knitters. Special resin finishing equipment is, without a doubt, the backbone of the industry. A sleazy high-shrinking cotton knit, after proper finishing, emerges with greatly improved handle, much reduced shrinkage and far better crease resistance than it could ever have hoped for in the absence of the resin treatment.

Two basic types of machines are used in this section. A 32 or 36 feed pattern wheel machine, 16 or 18 cut, 24 or 26 inches in diameter, is the standard model, augmented by a similar machine equipped with four finger strippers at each feed and a pattern pacing unit. Virtually every cotton knitting plant in the country is equipped with both of these machines, and they are so well known and accepted in the trade as a whole that any maker-up in the business will readily identify a fancy cotton pattern in accordance with the machine.

(Continued on Page 32)

on which it was made and expect to pay a premium for fabrics produced on striping machines as against those produced on non-striping models. This is an extremely competitive trade, resulting in a high degree of standardization in regard to weights, raw materials used and ultimate prices paid, almost invariably by the pound.

In consequence, perhaps in no other branch of knitting is the skill of the fabric designer of greater import, this being the only real chance a company has to distinguish its products from any other. It is all too readily realized that a good design does not cost any more to produce than a poor one, and the effort of the designer can usually be well rewarded, since the cost of designing can be spread over high turnovers. It is interesting to note that this is one of the principal advantages a large manufacturer in this field has over his smaller competitors, since there is very little economy of scale in this industry beyond a minimum size.

This section may be roughly divided into three major end uses: dresses, T-shirts and men's knitted shirts. There are specialists in each one of these groups, but mostly only in relation to selling. In actual production, there is very little difference between the fabrics used by each of these groups.

A more specialized machine in the same general category is a multi-feed loop model employed exclusively for the production of weft knitted plush. With the aid of 32 feeds, this machine can knit a great variety of patterned plush fabrics by means of a horizontal sinker-selecting wheel at each feed. This is one American model that has had considerable success abroad and probably does not need further elaboration here. It is interesting to note in this context that within the past two years there has been keen interest here in cropped plush, mostly imported into this country from Switzerland, Italy and Holland.

Some people in the trade have been referring to this fabric as knitted velveteen, and some have gone so far as to import knitting and finishing equipment from abroad in the hope of producing the same fabric. Consequently, at least two firms have

brought in a number of sinker wheel machines from Switzerland, as well as shearing equipment, and at least one of them is known to have regretted this step afterwards.

A first deviation from the pattern wheel principle on sinker top machine was revealed in a new multi-feed machine announced, but not shown, at Atlantic City last May. This machine comprises 64 feeds in stead of the customary 32 or 36, and needle selection is obtained from a stationary multi-step drum. It is an obvious step in the quest for still higher productivity, spirality or no.

**Sliver Type High Pile Machines**—High-pile machine operation on the sliver principle are in a group all by themselves and may be termed the "true" high-pile producers. Equipped with a carding device at each feed, these machines knit-in the sliver as it is fed to the needles. The principle of this type machine has been so often discussed that it hardly bears repetition. Suffice it to say that it forms the true basis of the knitted high-pile industry in this country and that, although the proper finishing procedure is said to be the hardest to evolve in this section, nothing of consequence could have been achieved without the right knitting equipment. This was a very lucrative field up to about three or four years ago, when competition set in at full force and lowered profits to the usual levels. Competition had to be met from other knitting branches, as previously mentioned, and more recently from tufters, who may prove the toughest to compete against. In the meantime, however, sliver-type high-pile fabrics have made a considerable reputation in the coating field as well as in the floor covering market. Acrylic high-pile throw rugs are not only household words but actual household items in virtually every modern American home today.

**Bulky Knit Machines**—These machines are used in sufficient numbers for strict yardgoods production in the U.S. to warrant a description under this general title. The one type of machine which has made a name for itself over the years in this connection is a coarse cut four-feed revolving cambox Leighton

model used extensively in the production of half-cardigan fabrics, though capable of other constructions as well. Despite the small number of feeds on this machine, it results in a very high rate of production, thanks to its relatively high speed of rotation and the large size of each individual knitted stitch.

As a typical example may be cited a three-cut machine, comprising 132 needles in a 14-inch diameter, whose normal production on half-cardigan fabric amounts to some 250 yards (14 ounces per yard, 50 inches wide) per shift. An operator will normally be expected to look after three of these machines. Though the total number of feeds is small—the same operator would look after three 36-feed pattern whel machines—the knitter finds his hands full due to very frequent yarn package changes resulting in turn from the coarse count of yarn employed.

Prior to the age of the foam back, wool bulkies were knitted on these machines, then steamed on a calender, and shipped in this form to the cutter, who set out to cut the rolls without further ado. The fabric thus possessed a great amount of inherent relaxation shrinkage which would be exhibited at the first opportunity. However, the garments were labeled "dry clean only," and the cleaner was expected to block them back into shape. There was not much point knitting other yarns in the same manner, since in no event could the garment be proclaimed washable, not having been adequately relaxed before making up. Orlon bulkies, for example, would be produced in garment strips rather than on a yardgoods basis, so that they could be washed and tumbled prior to making up, securing full relaxation before they reached the consumer.

Foam backing has wrought many changes in this as well as in other branches of knitting. Presently, a host of cotton bulkies are knitted on a yardgoods basis and subsequently laminated to prevent undue shrinkage through relaxation.

**Interlock Machines**—Equipment in this category has assumed greater importance as sweater-strip producers than as yardgoods models among American outerwear knitters. Conse-

quently, it is not often remembered that the initial interlock fabric is an American patent. In England, fine gauge interlock equipment has, of course, attained great importance for underwear manufacture. Not so in the U.S. Hence, when the interlock machine again came into demand after the war for T-shirt production, American knitters turned to both local and British builders for quick supplies. The most common type of interlock machine in this country is a 24 x 24 n.p.i. model (as compared to the 20 x 20 n.p.i. machines universally encountered in Britain). Fabrics from these machines were very popular about ten years ago but suffered greatly in the meantime through competition from the much cheaper sinker top fabrics, the machines for which could not only outproduce any interlock model but used appreciably coarser and, therefore, cheaper yarns. Thus, cotton interlock was pushed into the background. Interest in this type of fabric never died completely, however, and in the past year or so there have been signs of an imminent revival in line with the increasing popularity of double jersey fabrics. At present, one encounters numerous cross-tuck fine interlock cotton fabrics on the market obviously simulating double pique, and there can be little doubt that the popularity of the latter could do much to reinstate interlock as a highly sought construction in the very near future.

**Fancy Rib Machines**—This branch may also be termed an all-American section. The one machine referred to in this connection is the ubiquitous PR model built by Brinton for many years without any significant change except in the number of feeds. The machine is of the revolving cambox type, usually comprises between 10 and 14 needles per inch, in the modern version employs 24 feeds in a 28-inch cylinder, and invariably uses large pattern wheels at each cylinder feed and a knit-tuck miss regulation at each dial feed.

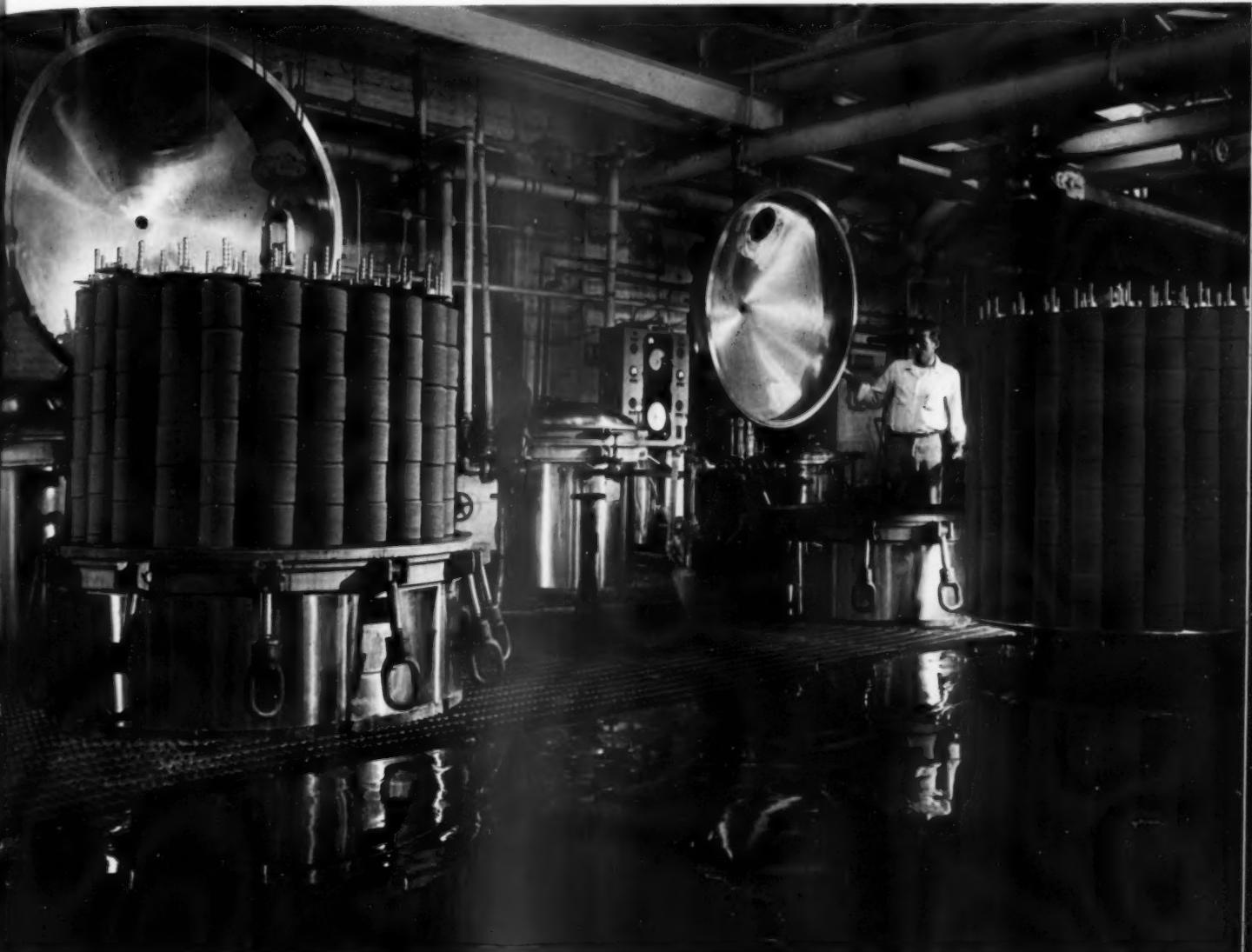
In its patterning capacity the machine has proved its versatility over the years. It is perhaps best known for its welt and ripple stitch patterns which have been very widely employed in

(Continued on Page 85)

# Color is the name for Morgan

TIMES

remained interlock patent. In interlock course, absence for Not so when the war came for American local and stock supplier a type of country model (as 20 n.p.i.) encountered from many popular but subse- quent time from the fabrics which could only interlock inexpensively cheaper interlock ground of fabric however, so there imminent increase in jersey encountered stock fine on the stimulating can be popularity much to highly the very



1,000-pound interconnected tanks — part of the Morgan Package Dyeing Department.



## DYESTUFFS THE HARD WAY

In Ancient Mexico, women gathered the cochineal insects from cactus . . . dried them, crushed the shells to powder which was used to dye the bright scarlet color so popular in their wearing apparel. This primitive practice spread to Europe, and became an important forerunner of modern dye technology.

## PACKAGE DYEING FROM A TO Z

It's a far cry from the crude technology of ancient Mexico to the modern operations of today. Here you see the shining stainless steel package dyeing tanks in the Morgan dyehouse which turn out lots up to 2,000 pounds of economically dyed yarns. *Synthetics?* The full range from A to Z. *Orlon?* Of course . . . more of it, we believe, than any other dyehouse in the industry. *Quality?* Second to none, pleasing an ever greater number of customers. Why not try our service for yourself . . . soon!

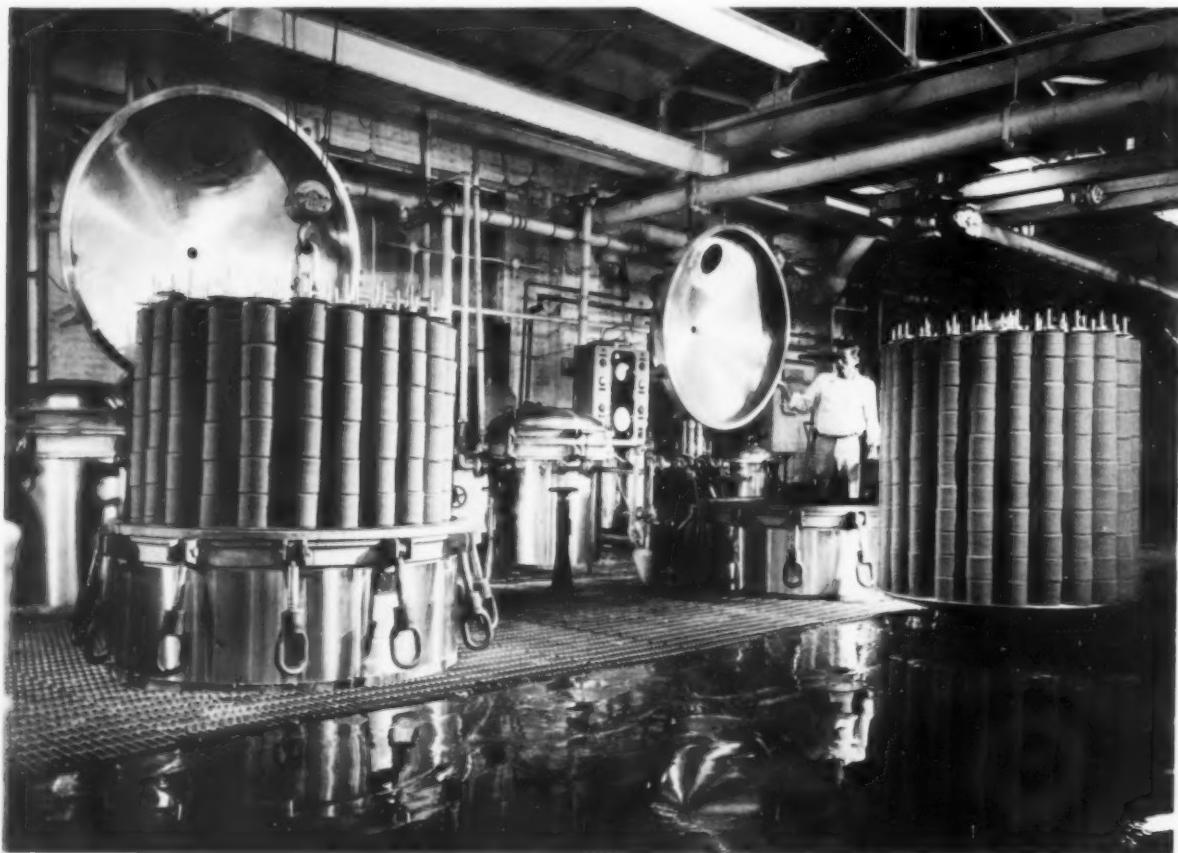
ACRILAN • CRESLAN • DACRON • DYNEL • KODEL • NYLON  
ORLON • ORLON SAYELLE • VEREL • ZEFRAK  
CASHMERE • COTTON • FUR BLENDS • MOHAIR • WOOL • WORSTED

Skein dyeing • Package dyeing • Raw stock dyeing • Top dyeing • Tow dyeing

# MORGAN

Morgan Dyeing and Bleaching Co., Inc. • Rochelle, Illinois

ABOUT THE ILLUSTRATION ON THE OTHER SIDE OF THIS INSERT:



*Color photography by Hedrick Blessing  
Bill Hedrick — photographer*

## PACKAGE DYEING AT MORGAN

The photograph here shows only a part of the Morgan Package Dyeing Department — but a mighty important part. What you see represents the latest advance in Package Dyeing technology . . . two huge kettles with interconnected circulatory systems. Operating together, with interchanging dye solution, they can produce 2,000 pound lots of beautifully, uniformly dyed worsted or syn-

thetic yarn. Operating singly, they produce 1,000 pound lots at peak efficiency. Other equipment in the department handles other lots of varying sizes . . . providing an enviable degree of flexibility to meet varying customer needs. It's all part of Morgan's continuing investment in research, planning, and progress . . . all teamed together to bring you the very best in dye service . . . always!

ACRILAN • CRESLAN • DACRON • DYNEL • KODEL • NYLON • ORLON • ORLON SAYELLE • VEREL • ZEFRAK  
CASHMERE • COTTON • FUR BLENDS • MOHAIR • WOOL • WORSTED

Skein dyeing • Package dyeing • Raw stock dyeing • Top dyeing • Tow dyeing

# MORGAN

Morgan Dyeing and Bleaching Co., Inc. • Rochelle, Illinois

**Manchester Knitting Machinery Show****Same Double Knit Trends As In U. S. Noted Abroad**

By CHARLES REICHMAN, Editor

MANCHESTER, England—A closer and less hurried study of the various knitting machinery and other exhibits at the 1961 International Knitting Machinery and Accessories Exhibition confirms the original impression, as reported in last week's issue, that there are surprisingly few basically new developments to be seen here. This impression is further supported by the remarks of one of the speakers at the conference of the Textile Industry Knitting Group held in connection with the show. Aside from the fact that he found little that

was "phenomenally new," the conference speaker indicated that many of the new innovations being demonstrated in reality were merely experimental models which would not become commercially available for a year or two.

Actually, to an observer who attended the 45th Knitting Arts Exhibition in Atlantic City last April, the few impressive innovations to be seen here are confined to those British and European builders who either did not exhibit at the Stateside show or whose participation in it was on a limited basis. It should be stressed, however, that in a number of instances the models which made their debut in Atlantic City are being shown to the overseas trade for the first time. Moreover, some of the machines previously introduced in the States have been further improved, based on reactions obtained at the U. S. show seven months ago.

The next meeting of the Federation will be held in Dornbirn, Austria, in July, 1962, in connection with the annual Dornbirn Fair.

The location of the 1963 meeting will be in Hanover, Germany. The meeting at that time will coincide with the International Textile Machinery Exposition which will be held in that city. An invitation was accepted from the Spanish delegation to the conference to hold the 1964 meeting in Barcelona, Spain.

U. S. knitting technologists were represented at the meeting by Charles Reichman, editor of the KNITTED OUTERWEAR TIMES and secretary of the American Society of Knitting Technologists; Otto Engelhard, director of research and development, Native Laces & Textiles, Inc.; and James Blore, fabric development director, Laurens Mills, the double knit fabric division of Deering Milliken. Both Mr. Engelhard and Mr. Blore are charter members of the American Society of Knitting Technologists.

In surveying the double knit equipment on display at Belle Vue, one soon discovers that terminology is as loosely used here as back home and that for-

ign machine builders are just as prone as their Stateside counterparts to designate as a double jersey machine any unit in their range capable of knitting a plain or fancy double knit fabric. This frequently makes analysis of a machine's stitch scope difficult.

The problem is further complicated by the tendency, as in the states, to assign coined or otherwise meaningless names to fabric structures coming off their machines. At one stand, for example, the fabric being turned out is described as English pique, a brand new double knit structure.

Careful examination of the fabric discloses, however, that it is nothing more than a quite conventional single pique fabric. By clothing it with an appealing name, the machinery builder evidently is seeking to make his equipment far more attractive than it may in reality be.

This does not mean to say, however, that some machine builders have not come up with some wholly new double knit structures. One construction that appears to be arousing interest among visitors and competing machine dealers alike is Tripleknit, a form of double pique. Tripleknit fabric is produced on a six-feed basis in the following manner on conventional interlock equipment as well as on the more specialized double knit machines:

Feed	Cylinder	Dial
1	Knit long needles	Knit short needles
2	Knit long needles	Welt all needles
3	Welt all needles	Knit long needles
4	Knit short needles	Knit long needles
5	Knit short needles	Welt all needles
6	Welt all needles	Knit short needles

This is the second of the series of reports reviewing knitting equipment developments seen at the 1961 International Knitting Machinery and Accessories Exhibition held at Belle Vue in Manchester, England, on October 11-21. Next week's report will cover circular sweater-strip machinery. Subsequent articles will discuss V-bed flat and full-fashioning machines, dyeing and finishing equipment and sewing and fabricating machinery.

The knitting of Tripleknit, as is shown by the preceding set-out, is seen to be an extension of the basic 1x1 interlock formation. The fabric, which is marked by a somewhat more pronounced honeycomb effect than conventional double pique, is more elastic and heavier than the latter.

**Positive Feeding**

Devices to assure the positive feeding of yarn to the knitting elements is one of the most striking features of some of the single-purpose double knit machines being demonstrated here. Not all machinery builders of such equipment have positive feeding instrumentation on their machines but practically all at least lay claim to having such mechanisms.

The concept of positive feed originated in the studies on yarn feeding undertaken at the Hosiery and Allied Trades Research Association in Nottingham. The first fruit of these studies was the HATRA yarn speed meter which measured the amount of yarn which was taken up by the knitting needles at each machine feed. From this came the specific devices for feeding a fixed amount of yarn to the needles irrespective of any tension on the yarn.

The concept of positive feed is not difficult to understand. The chief engineer for A. Kirkland & Co., which has equipped its new DJK-36 with positive feed, explains it this way:

"Positive feed gives the knitting needle the specific job intended for it—to form the loop. Without positive feed the knitting needle is required to draw yarn from the package, measure

(Continued on Page 78)



# ENERGETIC WORSTED

SUPPLIERS OF ALL GRADES OF WOOL

## THE FAMILY CIRCLE PREFERS KNITTED WOOLS

...from debutante to grandmother, from active sweater boys to big team athletes, no fiber in the world touches the wonderful comfort of all-American wool. Leaders in knitwear have built a profitable volume when they concentrate on wool. Retailers prefer the quality fiber of nature—all-American wool—because each investment in wool carries added value in performance. Turn to Energetic for all your wool needs. Specialists in wool yarn for the knitwear trade for more than forty years, they have a distinguished record of performance!



### MEMO TO KNITTERS

These are numerous virtues that make wool the "first" fiber with everyone, from consumer and retailer through every link in the production chain.

#### CONSUMER

Wool is the only fiber that gives true, natural warmth, always looks right and feels right. Its great absorptive ability gives wool a surface-dry texture — never clammy or cold even after being immersed in water. Its bouncy resiliency gives superior wearing comfort. Sturdy and long-wearing, it never wrinkles or musses. Wool is *kinder* to the skin than any other fiber used in knitwear.

#### RETAILER

Wool builds prestige because it spells quality, richness and full value received. Customers do not have to be educated on wool qualities; they are never confused. Wool satisfies; satisfied customers mean more business on a better mark-up.

#### KNITTER

Wool has no handling problems; works through machines with ease; never varies in its natural quality. Wool has a softness that enhances richness and texture of knitted fabrics.

#### SPINNER

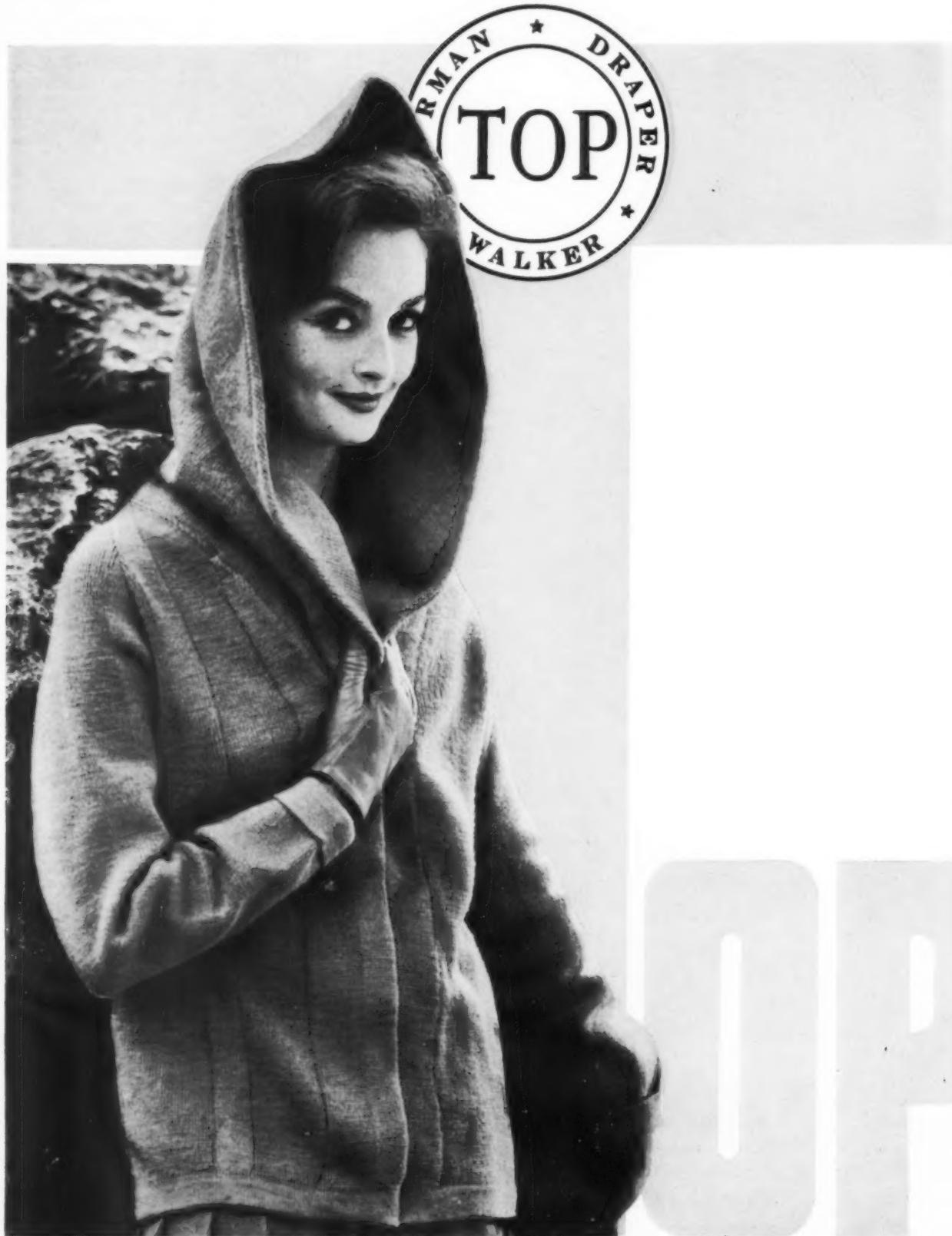
No time or money wasted in trial and error when working with wool . . . can be handled without special controls. Wool runs better on machines. It is always reliable; its performance is proven.

#### DYER

Wool is less costly to dye; dyeing is easier, doesn't require special machinery. Wool is easier to wind. Wool takes the widest range of shades, with no color-matching difficulties.

*Walter Daniel*

**CORPORATION**  
Bridgeport    Montgomery County  
Pennsylvania  
Telephone — Broadway 5-4970



RMAN \* DRAPER  
TOP  
WALKER \*

TOP

T  
po  
fu  
su

A  
in

# Wool Top

## HEADQUARTERS FOR NATURAL FIBERS OF ALL GRADES

### NOILS

### SCOURED WOOL

### LAMBS WOOL

Cashmere	Angora
Camel Hair	Rabbit
Vicuna	Mink
Silk	Muskrat
Flax	Raccoon
and other fur fibers	



THE key to the finest fashion is knitwear, and the key to the finest knitwear is WOOL.

The wool fiber is staging a lively revival in the fast-paced knitwear field, taking first position for Winter in fashion and volume on double knits, Baby shakers, Shetland types, fur blend coordinates, jacquards, mohair and wool blends, men's fine gauge lambswool sweaters.

AS SPECIALISTS in high-quality wool fibers for the knitting industry, The Top Company is prepared to keep you abreast of the rising knitwear wave, and is ready to supply your immediate wool top needs.

THE



COMPANY  
INCORPORATED

opmakers

WOONSOCKET, R. I.

BOSTON 10, MASS.

Your year 'round source



**Winona...**

for 100% cashmere yarn

**Wilson...**

for fur blend, lamb's wool  
and specialty fiber yarns

**Colonial...**

for dyed to match and  
coordinate skirting fabrics

Sales Representatives

PAUL A. BARKER  
1182 Broadway  
New York, N. Y.  
Murray Hill 9-0422

W. H. HUTCHINSON  
222 W. Adams St.  
Chicago 6, Illinois  
Franklin 2-0224  
Teletype CG 2127

FREDERICK P. TOLNAI  
819 Santee Street  
Los Angeles 14, California  
Madison 2-5777



For your convenience  
Teletype  
**NEWYORK 1-4275**  
**CLEVELAND CV 875**

**WINONA TEXTILE MILLS, INC.**

WEST 65th and BARBERTON • CLEVELAND 2, OHIO • ATLantic 1-3200

**THE WILSON TRADING CORPORATION**

1440 BROADWAY • NEW YORK 18, N. Y. • Wisconsin 7-2176

**COLONIAL WOOLEN MILLS, INC.**

WEST 65th and BARBERTON • CLEVELAND 2, OHIO • ATLantic 1-3200

## Knitting Equipment Developments

# Kirkland's DJK 36 High Speed Double Knit Machine

By J. B. LANCASHIRE

Senior Lecturer, School of Textiles  
Leicester College of Technology

IN this new and completely remodeled double jersey high production machine built by A. Kirkland and Co. Ltd., Syston, Leicester, England, the main emphasis is on production control in relation to maintenance of fabric quality and output. In addition to positive yarn feeding, there is a constant velocity take-up action and fabric remains under adjustable tension control while being wound onto the batch roller.

There are protective panels on both sides of the bottom revolving frame and a fiber glass platform situated underneath the batch roller ensures the rolls of fabric being removed without risk of picking up dirt and swarf in the process.

Fabric rolls are usually made up to about 35 pounds in weight prior to removal, but the machine can accommodate rolls weighing up to 90 pounds, if desired.

A graduated scale for setting the height of the dial and close camming with calibrated adjustment of cylinder stitch cams ensure the uniform distribution of yarn as it is measured out to the knitting needles.

The Kirkland DJK 36 machine is a dogless model with a needle cylinder 30 inches in diameter. It has 36 knitting feeds, and is offered in gauges 16 x 16 and 18 x 18. The needle cylinder revolves anti-clockwise and the dial is driven by spur wheel gearing through two diametrically opposed pedestals. In common with the bottom revolving frame, head wheel and all other revolving surfaces, the dial runs on ball bearings. Set screws on the dial driving wheel enable either rib gating or interlock gating to be obtained, as circumstances demand.

The drive is obtained through a V-belt from a fixed speed motor which moves from rest slowly, but accelerates to full speed in minimum time after giving the machine a safe start. The machine is stopped by an electrically operated disc brake. No conventional hand wheels are fitted, but on each of the four struts of the machine there is a four-button panel through which the machine can be stopped and which also controls fast and slow continuous speeds and jogging motions.

The slow speed is less than one revolution per minute and is obtained from an auxiliary motor when the slow speed button is pressed. A stop motion for the slow speed motor is available if required.

The jogging motion can operate on either fast or slow speed, but whenever the button for fast speed is pressed the auxiliary motor is automatically rendered inoperative.

In addition to the four four-button panels, there is also on the machine a socket for receiving a plug having an extension arm through which fast and slow jogging motions can be controlled by the operator from any position around the machine. The extension arm also carries an inspection light to facilitate detection of knitting faults, broken needles, etc. A cupboard built into the machine provides accommodation for spare parts and accessory equipment. Among the equipment items is a handle that can be utilized for turning the machine by hand should this procedure become necessary.

The main motor has a worm reduction unit, the gears of which run in an oil bath, and it also incorporates a Hainsworth expanding pulley which can be set to provide machine speeds ranging from 15 to 27 revolutions per minute. Under ordinary working conditions, the double jersey fabrics producible on the machine, including double pique, can be knitted efficiently at a running speed of 23 revolutions per minute. Risk of eccentricity as between cylinder and dial, or elsewhere on the machine, is obviated by a three-tier construction, each tier having its own robust supports to insure levelness.

All needle tricks in the dial are cut full length, verge bits are inserted and there are inserted tricks in the cylinder. Long and short single butted wire latch

needles with straight hooks are used in the cylinder, and straight-hooked single-butted long and short needles are also used in the dial, but these dial needles are plate needles, so that their butts may be either high or low.

The 36 feeds are equally distributed around the machine, and there are single feed cam sections in the dial cam plate which are freely interchangeable, these sections being located in correct positions by headed dowel pins. The normal cam settings give delayed timing, but mechanical changes can be made to obtain synchronized timing when necessary. By means of a control knob conveniently situated on each section of the cam plate, facilities are made available for tucking on the dial, this being achieved by vertical withdrawal of the clearing cam. Spare cylinder and dial cams are provided to enable *texti-piqué* and *knit-in Bourrelet* fabrics to be made.

The same guides are usable for feeding yarn to dial needles only as for feeding yarn to cylinder needles, and they have DZUS fasteners so that they are easily removable for cleaning or replacement. A noteworthy feature of modern Kirkland machines is their embodiment of many fittings that have been made by firms engaged exclusively in the manufacture of these specific machine parts, these being the very latest and best that the market can supply for their respective purposes.

The bobbin stand has two tiers, which give very easy access to yarn packages for replenishment when empty. An item of optional equipment is a bobbin stand offering accommodation for 72 packages; it can be adapted for magazine supply and embodies the special feature that in this case empty cones can be replaced without stopping the machine, thus reducing downtime to a minimum. Optional equipment also includes an additional time-saver in the form of a lint removal device which works by suction and has a bag for collecting the lint. Lint accumulation is minimized

by the streamlined construction of the machine itself and by its use of collapsible package holders which are totally enclosed by the packages they hold.

The yarn furnishing mechanism used on the DJK 36 machine is the Trip-Tape positive feed device with Kirkland-designed drive. Two master wheels situated above the bobbin stand are driving agents for endless tapes that make contact with plastic wheels, of which there is one at each knitting feed. As yarn is wound off from its package it passes through a poteye, round the surface of the plastic feed wheel, underneath a stop motion detecting wire, through another poteye, then over the arm of a rod that extends about 12 inches above the feeding unit, and from there directly to the guide at the knitting position. The yarn is firmly gripped between the surface of the plastic feed wheel and the inner surface of the rotating tape, and this secure grip provides the positive non-slip feed. The tape is woven from nylon yarns and its inner surface is coated with a non-conductive substance to eliminate static. The plastic wheels have Oilite bearings, and either porcelain or ceramic poteyes can be used, as desired. There is no top stop motion, and the total height of the machine, inclusive of the vertical guide rods of the Trip-Tape mechanism, is only 92 inches.

Yet another time-saving feature is a separate red light for every end of yarn on the machine, and vertical fluorescent lighting is applied to give maximum visibility. Other fittings include needle detectors and an automatic oiler for lubricating the four cam tracks. All ball races are self-lubricating.

Two drawing-off rollers revolving at constant speed impart a positive take-up action to the fabric as it leaves the needles; tension ring and stretches are fitted to control it as it passes downwards from knitting zone to rollers; and an adjustable compact compression spring unit operates the batch roller to control the winding up of the fabric roll.



## AT ATWATER, ONE IN TEN DEVOTES FULL TIME TO QUALITY CONTROL



**Simple self-interest is the reason.** You'll seldom find a company so concerned with the details of its own highly technical production . . . so wrapped up in quality standards that have stood the test of years . . . so determined to remain among its customers' best friends. We think this kind of self-interest, and the one-in-ten formula for quality control, suggest why Atwater is your one-in-a-hundred resource for TEXTRALIZED yarn for Ban-Lon, Taslan, Helanca and thrown yarn. Want further proof? You'll find it in the product.



ATWATER  
THROWING COMPANY  
PLYMOUTH, PA.

### SALES OFFICES:

R. P. Schellenberg  
Plymouth, Pa.  
Prospect 9-9568

Huggins Clelland, Inc.  
1440 Broadway  
New York 18, N. Y.  
BRYant 9-8752

Forrest Sharpe  
Dalton, Ga.  
BROADWAY 8-1653

A. L. Schrempp  
H. A. Schrempp  
Yardley, Pa.  
HYatt 3-3627

G. Allen Mebane  
High Point, N. C.  
Phone 88-28751

C. M. Patterson  
222 West Adams St.  
Chicago 6, Ill.  
Randolph 6-6787

Small, D  
incorpor  
quard f  
nylon l

OCT  
Swi  
Sc

Jen  
of the  
but s  
chara  
Swed  
Hans  
the U  
tribut

New  
been  
year's  
Helan  
used  
ing L  
as do  
French  
53 per  
nylon,  
cent n  
ton, a

Knit  
stitch  
very h  
light c  
neck a  
bing a  
legs. I  
a perf  
combi

Lyc  
come  
have a  
slightl  
These

**Swimwear**

# Scandinavian Influence Prominent In Jer-Sea Line

By ILANA HIRSCH

Jer-Sea of Sweden's 1962 swimwear collection retains much of the Scandinavian and Icelandic flavor that it had in the past, but several new aspects of the line give it a more diversified character. This line of ladies' swim suits, manufactured by one of Sweden's largest textile firms, Jersey Modeller, is designed by Hans Heitsch and marketed in the U. S. by P. & M. Distributors.

New fibers and blends have been incorporated into this year's line whereas in the past Helanca processed nylon was used exclusively. Suits containing Lycra make an appearance as do glittery lamés. Novilan, a French textured yarn made of 53 per cent wool and 47 per cent nylon, and a blend of 61 per cent nylon and 39 per cent cotton, are also new this year.

Knitted in a textured square stitch of the latter blend is a very high style suit and a highlight of the line. It is a scoop neck and back maillot with ribbing around the waistline and legs. Its silhouette simplicity is a perfect background for the combination of stitch structures.

Lycra-content swim suits come in solid colors only and have a new V-neckline that is slightly curved for a deeper cut. These suits are made of 23 per

cent Lycra and 77 per cent nylon.

Depending on the style of the suit, backlines range from high cut to medium to low, with heavy emphasis on the latter. The low backlines are either rounded or squared off.

Scoop, sweetheart, V and square necklines remain classics in this line, but new styles are a scoop that extends to the shoulder edge, and a high, round neck. The combination of a high front with a plunging backline definitely a European trend is utilized in more of the line's high style numbers.

Bodice seaming determines which of three bras is used in a particular suit. There is the floating bra, a bra with metal rimming the lower portion of the cup, and a third bra with perpendicular seaming.

Suits in this year's line are teamed with a matching headband with no increase in the price of the suit.

Design and color play an important part in the new line and are skillfully blended to compliment each other. Stripes and Scandinavian jacquards utilize the most unusual combinations as for example red, orange and coral; purple, sea green and lime; black, orange and olive and tone-on-tones of brown, blue and green. There is also a study in black, gray and white.

Bold, vertical stripes in the above and other unusual colors design only the front of Jer-Sea's most Continental number. It is a scoop neck, deep U-back maillot with very high leg cut. The back, in solid color, picks up a prominent color from the striped front. Despite its low back, this suit has very thin shoulder straps that, aided by skillful inner construction, sufficiently keep the suit in place.

Narrow stripes design a maillot with deep V-back and wide, to the shoulder, V-neck. Demonstrating Jer-Sea's unrestrained



One of Jer-Sea's popular Scandinavian jacquards designs both a V-neck swim suit with the new straight cut leg and casual coordinates-stretch Capris and boatneck, three-quarter sleeve slipon.

use of wild colors is a fabric utilizing a range of stripes from pin to awning. Two combinations are: red, orange, purple and blue and orange, coral, pale pink and olive. A more subtle coloration in the same pattern is light and medium gray, brown and terra cotta.

Jacquards also utilize bright and subtle shadings and come in several Scandinavian designs many of which are incorporated directly from Icelandic sweaters also manufactured by Jersey Modeller. Motifs are along stripe, diamond and zig zag configurations. Other suit designs include Ibis (a bird motif) and an Egyptian design consisting of small, hieroglyphic figures. There is also an oak leaf design, a foulard and a Scottish plaid.

In addition to classic maillot and sheath trunks and the high Continental leg, there is a new, straight cut leg that, by definition is between a maillot and a tapered boy leg. One suit with this leg has a V-neck and is patterned in a jacquard design. Its detachable sash is in a solid color. Skirted suits have a better

fit than they did in the past due to a new knit that is 10 per cent firmer. All suits, incidentally are knitted on Wevenit machines. They fall into a price

(Continued on Page 87)



Small, hieroglyphic characters are incorporated into an intricate jacquard featured by Jer-Sea. This nylon suit has a matching headband.



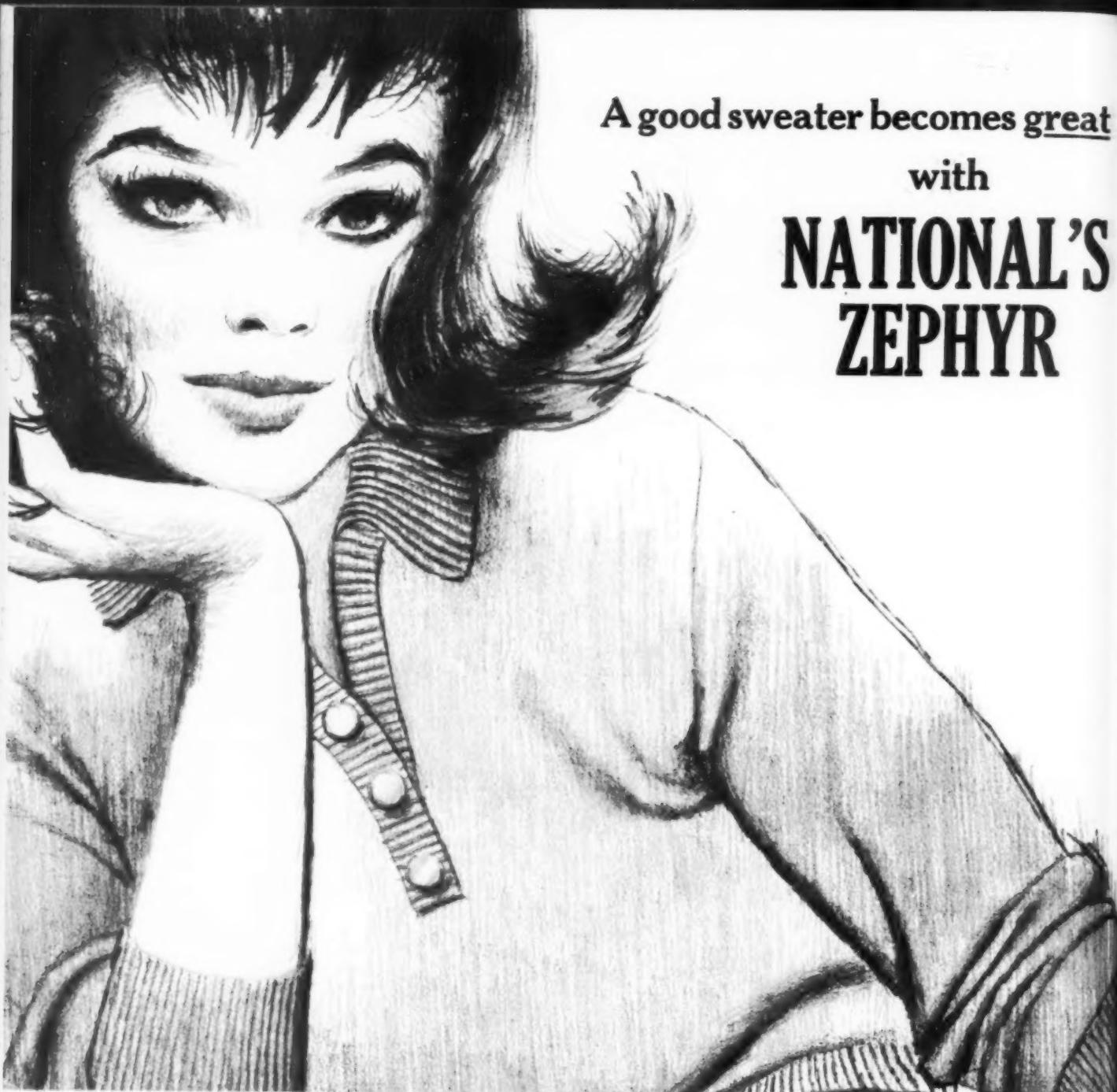
An oak leaf jacquard designs both the V-neck maillot and its matching headband knitted of Helanca processed nylon.

OCT  
obj  
Mu  
Tex  
M  
nent  
and  
for  
day  
attack  
He  
ing  
Sunbe  
Sunbe  
ciated  
Ltd.,  
1958  
dyein  
Allen  
Sun  
and t

A good sweater becomes great

with

# NATIONAL'S ZEPHYR



National Zephyr Yarns make the finest of knits because we supply quality in every step of production at our own ultra modern mills. National Zephyr Yarns use only choice wools. They are always evenly spun. Thus, they give you consistent uniformity in grade and manufacture. That is why double knit jersey or fine full-fashioned sweaters...or any other garment

that requires a superb worsted yarn...always has the crisp, luxurious hand which is instant evidence of quality — when knitted of National Zephyr Yarn! Available single or plied . . . on skeins, or on cones or on tubes . . . natural or dyed.

"QUALITY-at no extra cost"



**NATIONAL SPINNING CO., INC.**

NATIONAL YARN CORP. 2735 Prospect Ave., Cleveland, O.—Cherry 1-7500 • 1511 W. Florence Ave., Inglewood, Calif.—OREgon 8-4293

SPINNERS OF: WORSTED • ZEPHYR • MOHLAN • NYLON • TURBO ORLON • SPUN-GEE® • YAMA • NATURA® • ACRILAN • VYBRAN® • ORLON SAYELLE • AMORA • TEXTRALIZED® Yarn for Ban-Lon®

350 FIFTH AVENUE, NEW YORK 1, NEW YORK • LOngacre 5-0360  
Southern Representative DECATUR CUNNINGHAM, 919 Hill St., Greensboro, N.C.



**obituaries****Murray Mauer, 60:  
Textile Consultant**

Murray Mauer, 60, prominent textile consultant in dyeing and finishing of knitwear fabrics for over 40 years, died last Sunday following a sudden heart attack.

He was in charge of the dyeing and finishing division of Sunberry Textile Mills, Inc., Sunberry, Pa. He was associated previously with Silk Knit Ltd., Toronto. From 1950 to 1958, he was in charge of the dyeing and finishing division of Allen Knitting Mills.

Survivors are his wife Martha and three sons.

**Samuel Levine, Owner,  
Billie Knitwear Co.**

Samuel Levine, founder and owner of Billie Knitwear Co., Inc. died of cancer on October 15 after a year's illness. He was 60. He had been in the knitwear industry for 40 years and founded Billie Knitwear 27 years ago.

Mr. Levine is survived by his wife Sara; a daughter Arlene; a

son Bernard; three brothers, one of whom is Chuck Levine, Abbey Grey Knitwear, Inc., and three sisters.

**Roy Katz, Representative  
Of Sterntex, Southern Co.**

CHARLOTTE, N. C.—Services were held October 16 for Roy Katz, representative of Sterntex, Inc. and Southern Knitwear Mills for 20 years.

He is survived by his wife, two sons and a daughter.

**Edward Frimmel, 85**

PHILADELPHIA, Pa.—Services were held October 15 for Edward Frimmel, 85, retired manufacturer of women's knit suits and men's knit ties. He retired in 1923.

**Gov't Procurement****Knit Wool Shirt Award**

PHILADELPHIA, Pa.—The Military Clothing and Textile Supply Agency has made one award under QM-169 for men's knit wool shirts, to Summit Mfg. Co., Inc., here, for 12,012 at \$6.41 each. The procurement is for the Army and the Air Force.

*Serving the Knitted Outerwear and Hand Knitting Trades for Three Decades*

**HUNTINGDON****YARN MILL, INC.**

3114 E. Thompson St.  
Philadelphia 34, Pa.  
GARfield 5-5656

**Novelty Yarns Our Specialty.**

**Combination Twists of All Metallic,**

**Natural and Synthetic Yarns.**

*We welcome your inquiries for the development of yarns that are different.*

**A WORD IN PRAISE OF WOOL**

**Century after century, even before Abraham tended his flocks in ancient Israel, wool has protected mankind against the rigors of heat and cold.**

**History and experience have taught us here at Lion to respect our heritage of wool, the unique fiber that befriends humanity in all climes, everywhere.**

**The Lion Knitting Mills Co.**

3256 West 25th Street ■ Cleveland, Ohio

**Designers and Creators of High Quality Sweaters and Sweater Shirts for Men**

**DISTRIBUTED TO THE BETTER STORES BY SELECTED KNITWEAR SPECIALISTS**

# **LOOKING?**

**FOR SPRING, FALL OR BOTH—  
TRY THESE NEW PRODUCTS  
FOR INCREASED PROFIT AND QUALITY**

## **TURBLOWN®**

WOOLEN SPUN TURBLOWN® ACRYLIC

DYED TO MATCH  
LOFT, COVER, HAND  
TURBO YIELDS  
PASTELS, BLEACH, BRIGHTS  
MEN'S OR WOMEN'S COLORS  
SOLIDS OR HEATHERS  
FINE AND COARSE SIZES

## **TURLON®**

WORSTED SPUN TURBO ACRYLIC

SKEIN OR PACKAGE DYED  
COARSE DENIER AND SIZES  
FINE DENIER AND SIZES  
BLEND WITH WOOL  
DOUBLE KNITS, JERSEY  
COMPARABLE QUALITY  
INCOMPARABLE PRICE

## **MOHAWK YARN CORPORATION**

437 FIFTH AVENUE  
NEW YORK 16, N. Y.  
MURRAY HILL 5-9277

### **NORTHEAST SPINNING CO.**

Woolen System Yarns  
Lamb's Wool, Shetlands  
Fur Blends, Alpaca  
and Garnetted Yarns

### **MOHAWK SPINNING MILLS**

Package or Skein Dyed Turbo  
Jersey and Double Knit Yarns  
Pile and Tufting Yarns

### **DIXIE MERCERIZING CO.**

Worsted and Cotton Spun  
Natural or Dyed  
TURBO ORLON  
ALL END USES

**Mill News****Max Lowenthal Elects Officers**

Robert L. Lowenthal, president of Max Lowenthal & Sons Inc., has announced the election of officers and executives of the newly formed company which succeeds the partnership of Max Lowenthal & Sons. They are:

Arthur E. Lowenthal, vice president, a graduate of Union College with a degree in engineering, with the company since 1941. He will head the engineering, research, quality control departments and be responsible for all technological matters.

John W. Hixson, vice president, general manager, and treasurer. He was formerly controller. Mr. Hixson is a member of the Controllers Institute of America and a past president and director of the Rochester Control.

Harry E. Robinson, vice president and general sales manager. He was assistant sales and traffic manager.

Henry F. Broomfield, factory manager in charge of manufac-

turing. He is a graduate of Hobart College.

Manuel D. Goldman, Secretary of the newly formed corporation.

**Donmoor-Isaacson Name Two In Southeast Sales**

Jesse Rolnick has been promoted by Donmoor-Isaacson to Southeastern regional sales manager, a new post.

Mr. Rolnick, who has represented Donmoor since 1947, has added Bart Sturtevant to his staff to cover a good part of Florida, Georgia and Alabama. Mr. Sturtevant was previously a boys' wear buyer and merchandiser for the Meyers Company and Royden Wear, both of Greensboro, N. C.

**Rose Marie Reid Loan**

VAN NUYS, Calif.—Rose Marie Reid, women's swimwear firm, has obtained a \$1,500,000, 15-year term loan from the Prudential Insurance Company of America, it announced. Goldman, Sacks and Co., New York, assisted the company in the financing.

**MEIMAN MILLS, INC.**

Woonsocket, R. I. • Webster, Mass.

**SPINNERS OF****WOOLEN SYSTEM YARNS****BLEND'S OF LAMB'S WOOL/ORLON®****100% SHETLAND—100% LAMB'S WOOL****GARNETTED ORLON®**

**YARNS SOLD THROUGH**

**MEIMAN & CO., INC.**

**350 Fifth Avenue**

**New York 1, N. Y.**

**Oxford 5-5825**



MEASURES  
NOTHING  
UP  
TO  
WOOL

MARRINER & Co., Inc. — Top Makers

# Struck oil

... No, let's not get carried away. You won't necessarily hit the jackpot simply because you use Du Pont fibers. But we do claim that these are the best-known, most trusted and preferred man-made fibers in the world, bar none. And Du Pont keeps building this preference through a strong advertising program, including network TV, magazines, newspapers, radio ... Fibers are just one factor in your operation. An important factor, though. You've a far better chance for far better business when you feature Du Pont fibers on your labels, in your advertising and in your selling plans.

**GET A SELLING EDGE WITH  
DU PONT  
NYLON "ORLON"\*\* "DACRON"\*\*\***

ACRYLIC FIBER

POLYESTER FIBER



BETTER THINGS FOR BETTER LIVING...THROUGH CHEMISTRY

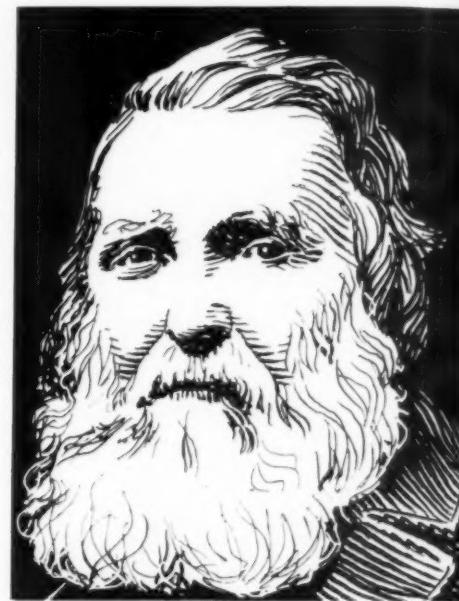
\*DuPont's registered trademark for its acrylic fiber. \*\*DuPont's registered trademark for its polyester fiber.  
Enjoy the "DU PONT SHOW OF THE WEEK", Sunday nights, NBC-TV.





# fallspun

quality-control standards were written by **John Ruskin**



**FALLS YARN MILLS, INC.**

*Established 1904*

Woonsocket, Rhode Island • POplar 9-9880

**Selling Agents:**

Stanley Porter, New York City  
 Schaeffer, Pfizenmaier & Kirkland Co., Boston, Mass.  
 W. J. Miller, Philadelphia, Penna.  
 C. L. Miller & Sons, Utica, N. Y.  
 James & Cheatham Yarn Co., Burlington, N. C.  
 D. F. Swain Co., Chicago, Ill.

*"There is hardly anything in the world that some man cannot make a little worse and sell a little cheaper and the people who consider price only are this man's lawful prey."*

That's why — for your protection and ours — Fallspun Yarns are controlled up to quality, at a competitive price.

If you, too, insist on dependability, specify Fallspun quality Yarns . . . produced exclusively on the woolen system from all fibers and combinations of fibers including Vicuna, Cashmere, Guanaco, Alpaca, Angora, Mohair and all the fur fibers, wool and synthetics of every type and description.

**Mill News****Perry Knitting Ends Plans To Sell Firm**

PERRY, N. Y.—Perry Knitting Co., this village's largest employer, has disclosed that recent negotiations for its sale have been terminated.

"Operations will continue under present management," said George M. Traber III, president of the 80-year-old textile company.

He said a reorganization will result in streamlining operations and consolidating administration. Several changes have been made in personnel, eliminating a number of top positions. He did not disclose the number dropped from the payroll.

Currently the company, New York State's largest cotton fabricating concern, employs 670 men and women in its Perry, Mt. Morris and Fillmore plants. The president said there may be a seasonal layoff as production swings from winter to summer output but employment is expected to remain stable or pick up later on.

A few weeks ago the company had announced that a buyer was

negotiating for the purchase of the company. At present there are no talks with anyone on the matter of sale, Mr. Traber said.

**McGregor To Introduce X-Pan, Mesh Action Back**

McGregor-Doniger, manufacturer of men's and boys' sports-wear, will introduce a new action back called X-Pan in jackets and sports shirts in connection with its Total Look of Action theme for spring.

X-Pan is Lycra combined with cotton and DuPont nylon mesh insets, which flex with the body motion and spring closed when not in action, giving ventilation without permitting rain to break through, the company said. The innovation is exclusive with McGregor-Doniger and will be featured in all the drizzler jackets and in all-sports woven shirts.

**Gilbert Owren Named Glen Raven Vice Pres.**

Gilbert T. Owren, general sales manager of Glen Raven Knitting Mills, Inc., has been named a vice-president of Glen Raven Mills, Inc.

He has been with the firm since 1948.

**SCHAEFFER, PFIZENMAIER & KIRKLAND**

FEATURING

**YARNS**

FOR THE

KNITTED OUTERWEAR TRADE

**WORSTED — ZEPHYR — SYNTHETICS — BLENDS****FROM LEADING SPINNERS****NEW YORK**

350 — FIFTH AVENUE

LOngacre 3-0479

**PHILADELPHIA**

3701 NO. BROAD STREET

BALDWIN 3-6295

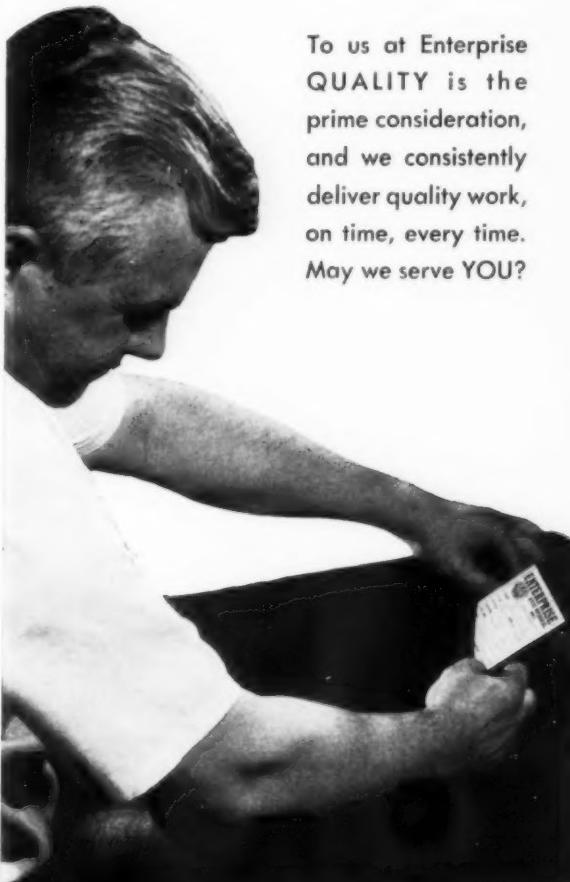
**BOSTON**

246 SUMMER STREET

Liberty 2-9660



## **WE CONCENTRATE ON QUALITY**



To us at Enterprise  
**QUALITY** is the  
prime consideration,  
and we consistently  
deliver quality work,  
on time, every time.  
May we serve YOU?



**ENTERPRISE**  
DYE WORKS, INC.

Established 1884

WOONSOCKET, RHODE ISLAND

DIAL 401  
PO 9-8700

DYERS AND FINISHERS

Of Tubular Knit and Flat Woven Fabrics  
— Wool, Wool Blends & Synthetic Fibers —  
For the Apparel and Upholstery Trades

*Dercy A. Legge*

75 YEARS YOUNG!  
THE INTEGRATED  
YARN SALES  
AGENCY



We are ONE OF THE OLDEST yarn sales agencies that completely services the requirements of all branches of the knitting industry.

FOR THE SWEATER AND OUTERWEAR TRADE we have all types of natural and dyed yarns on the woolen and worsted systems, including Turbo Orlon, Orlon Sayelle, Dacron and all synthetics, as well as mohair, fur and angora yarns. Also very fine worsted yarns for the most particular suit manufacturer.

FOR THE UNDERWEAR TRADE we have the finest merino and all wool yarns, cotton and Firestone's Contro elastic thread.

FOR THE HOSIERY TRADE we have a wide range of blends in natural and color including synthetics and cotton.

*We represent the following mills, all dedicated to the manufacture of quality knitting yarns, competitively priced.*

THE ALLENDALE CO.....	Centredale, R. I.
ARGONNE WORSTED CO.....	Manville, R. I. and Ellsworth, Me.
BEAR BRAND HOSIERY CO. (YARN DIVISION).....	Kankakee, Ill.
THE BONIN SPINNING CO.....	Woonsocket, R. I.
CONCORDIA MFG. CO., INC.....	Central Falls, R. I.
FIRESTONE RUBBER & LATEX PRODUCTS CO.....	Fall River, Mass.
WORCESTER TEXTILE CO.....	Greystone, R. I.

*Dercy A. Legge*

Established 1886



683 Atlantic Ave., BOSTON 10, MASS.      Liberty 2-7570	222 West Adams St., CHICAGO 6, ILL.      CEentral 6-8915
432 Park Ave. South, N. Y. 16, N. Y.      MUrray Hill 9-8496	18 Don Ave., EAST PROVIDENCE, R. I.      GEneva 4-1622
8 Cynwyd Rd., BALA CYNWYD, PA.      MOhawk 4-1950	710 W. Market St., GREENSBORO, N. C.      BRoadway 5-3136

## Jantzen To Start Line For Juniors In Spring 1962

PORLAND, Ore. — Jantzen Inc. has established a new sportswear division, created primarily to appeal to the growing junior market. It will have a specially designed Jantzen Jr. label and a distinctive new hang-tag and package.

The initial line, planned for spring and summer, 1962, will be ready for presentation to the trade in November. First deliveries are scheduled for the latter part of February, Don Kennedy, vice-president and assistant general manager of Jantzen, announced.

Julie Isles, well-known in the junior sportswear field and designer for the Mr. Mort sportswear collection for the past three years, has created a complete collection for the new division. In addition to swim suits designed exclusively for the junior market, it will comprise a complete assortment of active and spectator sportswear separates, including knits, to coordinate

with the swim suits. A complete junior size range, beginning with size 5, will be used.

It is expected that distribution will be primarily through those stores which have established junior departments. Mr. Kennedy said the line will be handled in such a way as to avoid conflict with misses' departments. In the first year, the junior line will be offered to a limited number of stores.

"With our swim suit experience," he said, "we feel that we are in the best possible position to produce a junior line of swimwear completely integrated with sportswear. While we recognize that swim suits are basically sold as items, we have merchandised our collection by using color, fabric and styling to create complete beach wardrobes. This means multiple sales for the retailer."

The Jantzen Jr. collection has been styled with "a fresh, new sophisticated look in junior sportswear" as its objective.

"There is an ever-growing junior market, as everyone knows which has not been adequately catered to or completely

(Continued on Page 55)

## AIREDALE WORSTED MILLS, INC.

Boston, Mass. • Stony Point, N. C.

SPINNERS OF  
WORSTED YARNS  
ORLON® SAYELLE  
TURBO ORLON®  
(NATURAL AND COLORED)



YARNS SOLD THROUGH

### MEIMAN & CO., INC.

350 FIFTH AVENUE  
NEW YORK 1, N. Y.  
OXford 5-5825

with the swim suits. A complete junior size range, beginning with size 5, will be used.

It is expected that distribution will be primarily through those stores which have established junior departments. Mr. Kennedy said the line will be handled in such a way as to avoid conflict with misses' departments. In the first year, the junior line will be offered to a limited number of stores.

"With our swim suit experience," he said, "we feel that we are in the best possible position to produce a junior line of swimwear completely integrated with sportswear. While we recognize that swim suits are basically sold as items, we have merchandised our collection by using color, fabric and styling to create complete beach wardrobes. This means multiple sales for the retailer."

The Jantzen Jr. collection has been styled with "a fresh, new sophisticated look in junior sportswear" as its objective.

"There is an ever-growing junior market, as everyone knows which has not been adequately catered to or completely

(Continued on Page 55)

# FOR SUPERIOR FINISHING CALL VIKING

EXPERTS IN WASHING OF

- 90/10 Wool and Mohair Blend
- 100% Wool, to give the feel of 90/10 Wool and Mohair Blend
- Orlon Sayelle, for maximum relaxation and bulking
- Garnetted Orlon and all other synthetics

First processors in the country equipped to handle 1,250 lbs. in one washing!

Call Sam Lefferts at

# VIKING KNITWEAR PROCESSING, INC.

1636 Decatur Street (Corner Wyckoff Avenue)  
Ridgewood, Queens, N. Y. — EV 6-3934

# TWO GREAT NAMES COMBINE!

**BIBB**

and

**STICKLEY**

*John L. Stickley & Co.*

is proud to announce its appointment  
as sole sales agents for the

WORSTED DIVISION OF

**BIBB MFG. CO.**

offering Turbo Orlon®, Orlon Sayelle®,  
and Jersey yarns,  
both natural and package dyed.

*John L. Stickley & Co.*

New York Office:  
358 5th Ave.  
Oxford 5-4778

Pennsylvania Office:  
265 Colket Lane, Wayne Pa.  
MURray 8-0300

Charlotte, N. C. Office:  
1615 East Blvd.—Tel. CE 190  
EDison 3-9253

John L. Stickley • E. Clay Timmons • Robert F. Branscombe • Robert F. Howell, Jr. • James Y. Rogers, Jr. • Jack Stickley, Jr. • Edward A. Morgan • George Wehrlin • Martin H. Herchler

REPRESENTING

Milwaukee—ask Long  
Distance for Enterprise 8-1900  
Cleveland—ask Operator  
for Enterprise 9253

Peerless  
Duesberg-Bosson  
Sauquoit  
Stickley  
Mt. Mitchell  
Elmvale  
Foremost  
Bibb

OCT  
cove  
wea  
will  
the  
“  
estin  
sent  
a mi  
total  
This  
000  
grow  
desi  
will  
scio  
taste  
thos

“  
first  
call  
will  
num  
disti  
a co  
adeq  
intro  
orde  
stan  
be  
plan

A  
set  
vert

D

ETS  
fur b  
fines

HOL  
wor  
alpa

ROB  
cash

LE P  
fren

“AD

Brad

FILA  
ang

L E

143

Phila  
Canad

OCTOBER 23, 1961

55

covered by our misses' sportswear lines. The Jantzen Jr. line will be designed primarily for the 14-to-25-year group.

"According to government estimates, this group—representing seven per cent of the nation's population—actually buys a minimum of 15 per cent of the total female apparel purchased. This group today numbers 27,000,000. By 1975, it will have grown to 57,000,000. We have designed a line with a look that will appeal to these fashion-conscious young customers whose tastes and figures differ from those of the misses line.

"Our entire approach, the first season, will be on what we call a target marketing level. We will only be able to sell a limited number of stores and the whole distribution program will be on a controlled basis, so that we can adequately service stores which introduce the new collection. In order to maintain our rigid standards, manufacturing will be done in existing Jantzen plants."

A separate budget has been set up for a strong national advertising and promotional cam-

paign, with Hockaday and Associates as the advertising agency.

In most areas, the line will be handled by the company's representatives for its misses' sportswear lines; but in certain territories, representation will be through special salesmen.

### Alamac Offices Open In Calif.; Coast Sales Up

Alamac Knitting Mills, Inc. has opened a new showroom and sales office in the Los Angeles Building, 124 East Olympic Blvd., Los Angeles, to service the West Coast. Bernard Fletcher, national sales manager, will supervise the new operation in addition to continuing his duties at the New York City headquarters.

"The West Coast expansion," according to Max Thal, president, "is an outgrowth of a current multi-million dollar expansion on production facilities. This in turn has been promulgated by a substantial sales in-

(Continued on Page 57)

## DISTINCTIVE SPECIALTY

# YARNS

ETS J. J. PETIT, Verviers, Belgium—  
fur blends and angora—cashmere and synthetics  
finest lamb's wool yarns; 100% shetland yarns,

HOBRON SPINNING CORP.—  
worsted yarns "bulkspun 7's", mohair and wool blends,  
alpaca yarns, "THERMOGEN"\*\* medicated wool yarns

ROBERT CLOUGH (Keighley) Ltd., Grove Mills, England—  
cashmere, mohair, alpaca and rare fiber yarns on the worsted system

LE PEIGNE S. A. Malines, Belgium  
french-spun zephyr and novelty twist yarns — white and vigoreux

"ADERETH" CO. LTD. TEL-AVIV ISRAEL  
Bradford and french spun zephyr yarns—jersey yarns

FILATURE RAYMOND BAUDIN, Saumur, France  
angora yarns

yarns as only century-old European craftsmanship can make them . . . available to you at the same convenient terms as domestic yarns

- **FUR BLENDS**—Lamb's Wool with Angora, Muskrat, Rabbit, Cashmere, Silk or Synthetics
- **MOHAIR BLENDS**—WORSTED, ZEPHYR AND BLENDS, 100% ALPACA
- **100% AUSTRALIAN LAMB'S WOOL**
- **100% SHETLAND & SHETLAND BLENDS**
- **All types of CHENILLES, NOVELTY TWISTS, TWEED YARNS**
- **100% FRENCH ANGORA—AND BLENDS**

LEADING SUPPLIERS TO MANUFACTURERS OF HIGH GRADE KNITWEAR

# hohenberg company

1431 BROADWAY

NEW YORK 18

PE 6-4260

Philadelphia Office: HARRY H. HAFF, Adams Ave. & Leiper St.  
Canadian Office: HOHENBERG CO., INC., 7080 Hutchison St., Montreal

CUmberland 8-3732  
CRecent 4-8284

\*Pat. Off. U.S. Reg. Trade Mark

# KIRKLAND can serve you



## New 36 feed 30" diameter double knit machine

- Engineered for high production and low operating costs.
- Measured yarn feed, measured stitch length, measured take down.
- Double pique, single pique, interlock, eight lock and bourrelet.
- Maximum control of needles by cambox and camplate cams for production of quality fabric at high speed.
- Superior accessibility to knitting head and take down mechanism.

**A KIRKLAND & CO LTD**  
**APEX WORKS, SYSTON, Nr. LEICESTER, ENGLAND**

crease each year for the past five years. The West Coast has been a focal source for the knitwear field, particularly in sportswear, because knit fabrics can quickly adapt to the rapid fashion change of this dynamic market."

#### **Completed By December**

The decorating of new headquarters is expected to be completed by December. The office and showroom will be a duplicate of national headquarters in New York City. The same service and sample display with the complete color story will be available. Substantial space has been set aside for stockroom and sampling facilities to provide immediate service for western customers. Key executives of Alamac will alternate between the two offices.

#### **Entire Floor**

Arrangements have been made to take over the balance of the 17th floor of the New York City headquarters at 1412 Broadway. Alamac will now have an entire floor devoted exclusively to sales departments and executive offices.

According to Steinberg & Pokoik, agents for the building, the lease signed was one of the

largest ever made at that address.

\* \* \*

LOS ANGELES, Calif.—Irwin and Frank Mayer, Irwin Mayer & Associates, announced today that they have terminated their relationship of 13 years with Alamac Knitting Mills, as their west coast representatives. Alamac's new offices on the West Coast will be staffed by its own employees.

Irwin Mayer & Associates shall continue to act as independent selling agents with headquarters at 819 Santee Street, Los Angeles. At this time they are giving consideration to representing both knitted and woven lines. They stated that they will reveal their final plans at a later date.

#### **Trade Drives**

#### **Arthritis Drive Heads**

Nat Edelstein, vice president of Rose Marie Reid, and Sim R. Gluckson, vice president of the Sunrise Knitwear Company, will serve as 1961-62 co-chairmen of the knit sportswear division of the New York Arthritis and Rheumatism Foundation.

## **FINE LAMB'S WOOL**

**SCOURED · CARBONIZED · COMBED**



Processed especially for knitting yarns

# **FRED WHITAKER CO.**

PHILADELPHIA • BOSTON

## **PREMIER FRENCH ZEPHYR**

1/20's to 2/60's

**ZEPHYR HEATHERS**

**FRENCH SPUN 11½'s**

**TEXTRALIZED® NYLON**

For High Quality BAN-LON® Products

**TOW-HUE TURBO ORLON® ACRYLIC**

6 Denier Dyed Orlon on cones

**SUPERIOR 7 STOCK  
MOHAIR BLENDS**

## **The IRVING COHEN YARN CORP.**

—French and American Spun Yarns—

IT COSTS LESS TO USE THE BEST

130 Palmetto Street

Brooklyn 21, N. Y.

HYacinth 1-1600



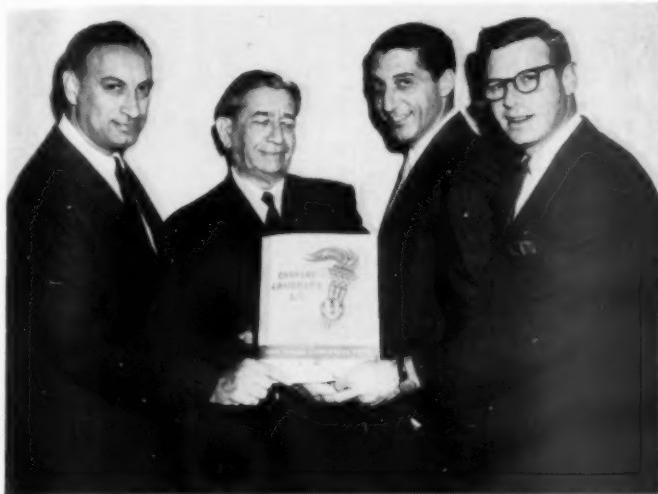
the latest developments  
in urethane foam.....  
**BOOTH 65**

**NOSA** exhibit

(OCTOBER 28th TO NOVEMBER 1st) NEW YORK TRADE SHOW BUILDING

640 WEST 134 ST., NEW YORK 31, N. Y. • Foundation 8-9400





At the Knitgoods United Fund Drive dinner at Beck's Restaurant, Philadelphia, are, left to right, Dr. Edward B. Shils, executive secretary, Knitted Outerwear Manufacturers Association, Pennsylvania District; Jack Rosenblatt, Highland Knitting Mills; Martin Ortiner, Bergman Knitting Mills, and Jan N. Lipsey, chairman of the fund drive.

### Synthetics

#### Robert Perry Becomes Am. Cyanamid Analyst

Robert W. Perry has joined the fibers division of America Cyanamid Company as a market analyst. He will report to Marilyn Haggerty, manager of

market research.

Mr. Perry was a textile market analyst for the market planning service division of the National Credit Office, New York City, and a merchandise and marketing representative for Mobil Oil Company, New York City.

## METALLIC NOVELTY YARNS, INC.

### COMMISSION SLITTERS

Metallic and Plastic

### MANUFACTURERS

### CONVERTERS

**Sizes to Your Specifications**

Cellophane  
Acetate  
Butyrate  
Mylar

All Constructions of Supported & Unsupported Yarns

252 Marion Street      Glenmore 2-5362  
Brooklyn 33, N. Y.      2-6698



## WORSTED YARNS PACKAGE -DYED BY GLOBE

. . . faithfully capture the most subtle of color conceptions created by leading fabric and garment stylists. A new dimension in color beauty and elegance is assured your creations when you specify worsted yarns packaged-dyed by Globe.

Globe does package dyeing on tubes, skein and warp dyeing, warp bleaching and sizing.

Yarns processed include cotton, worsted, linen, blend and novelty yarns, and all synthetics—including Arnel®, Creslan®, Orlon®, and Zefran®.

4500 Worth Street  
Philadelphia 24, Pa.

1865





From spinning  
to dyeing,  
CROSS yarn is  
as fine as human  
skill and technology  
can produce

# CROSS

*...the finest cotton knitting yarn*

Double-Carded or Combed  
Bleached or Dyed



**Cross Cotton  
Mills Company**  
MARION • NORTH CAROLINA

Jacobs and Robeson Co., 40 E. 34th St., New York, N.Y.; Carl L. Miller & Sons, 808 First Nat'l. Bank Bldg., Utica, N.Y.; Oliver R. Cross, P.O. Box 529, Marion, N.C.; Carl L. Miller & Sons, 7 Bala Ave., Bala Cynwyd, Pa.; David F. Swain & Co., 105 W. Adams St., Chicago 3, Ill.; J. Allison Davant, Jr., 1011 Johnston Bldg., Charlotte, N.C.

**Synthetics****Eastman Testing Polyester Elastic**

A polyester elastic fiber is currently being evaluated by Eastman Chemical Products, Inc., Eastman Kodak Company subsidiary.

The fiber is reputed to possess resistance to discoloration and deterioration from chlorine-type bleaches and atmospheric fumes including oxides of nitrogen and relatively high resistance to deterioration from heat. During the evaluation, it will be known as T-1700 polyester elastic fiber.

Present elastomers are of polyurethane. The new fiber is the first derived from polyester and does not fall under the Federal Trade Commission's definition of a spandex fiber.

According to the firm's data evaluation to date indicate that fiber has a higher modulus than any current spandex fiber or rubber. Tenacity is similar to spandex fibers and approximately double that of rubber. Its elongation is similar to that of spandex. Elastic recovery, creep, power decay, and related

performance factors appear satisfactory.

The new yarn is a monofilament with a circular cross section. The fiber is dyed to fast colors with dispersed dyes and reportedly imports a soft, comfortable hand.

The company expects to begin production of pilot plant quantities of T-1700 and officials of commercial production after the trade evaluation.

W. S. Vaughn, Eastman president, said market studies have indicated a substantial demand for man-made elastic fibers. Foundation garments and swim suits are expected to be important fields of use for the fiber. Eastman also expects the unique properties of T-1700 fiber to hasten the development of other end uses in which present elastomers are not employed.

**American Enka Appoints Jay Kaner Nylon Head**

American Enka Corp. has reorganized its merchandising activities on a divisional basis, appointing S. W. Holmes as rayon merchandising director and Jay Kaner as nylon merchandising director.

# FOR THE FINEST CUSTOMADE YARNS

*Be  
Sure  
They Bear  
The Mark  
of...*



*Whittier Mills*

## Worsteds • Synthetics • Blends For KNITTING & WEAVING

CUSTOMADE worsted and mohair blends for SHETLANDS & BRUSHED knitted & woven fabrics.

CUSTOMADE yarns for DOUBLE-JERSEY fabric.

Fine ZEPHYRS for all purposes.

WRITE or PHONE

### WHITTIER MILLS CO.

Chattahoochee Station

Atlanta 21, Ga.

SY 4-3366

### BUCKNER-HOWARD & CO.

350 Fifth Avenue

New York 1, N. Y.

BR 9-6320

# KNITTING ARITHMETIC

**the right source**

=

**the right yarn . . .**

*Representing . . .*



101 West 31 St., New York 1, N. Y.  
OXford 5-7887

### AMERICAN THREAD COMPANY =

Star Spun Turbo Orlon — Dyed and Natural

### CAMDEN YARNS, INC. =

Finest Quality Wool Spun Yarns

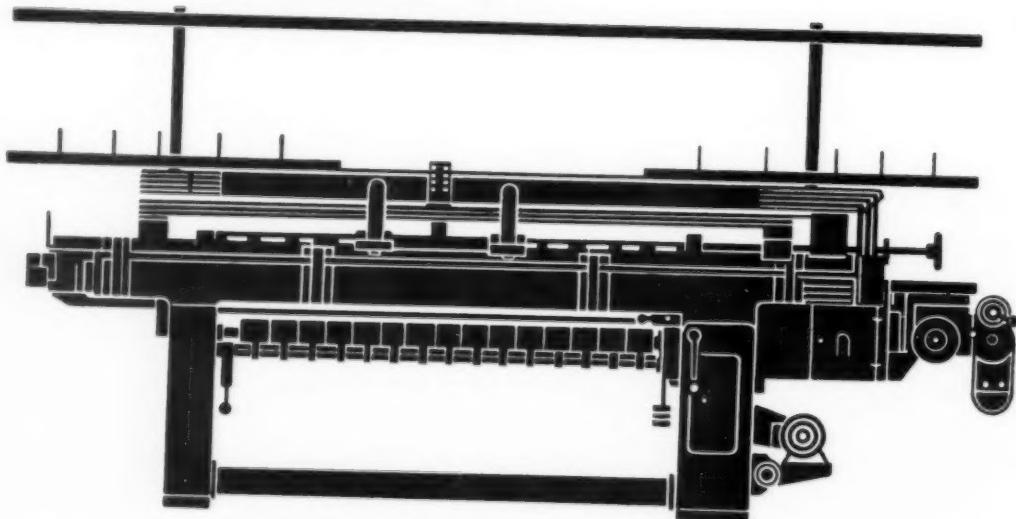
### OSCAR HEINEMAN CORPORATION =

Textralized Yarns for Ban-Lon Garments and Fabrics

### BECK-KLEIMAN =

Worsted Yarns — Dyed and Natural

# To say Links-Links is to say Stoll



# STOLL

Manufacturers:  
**H. Stoll & Co.,**  
Reutlingen/Germany

Agents for USA:  
**Knitting Machine & Supply Co., Inc.**  
3710 Hudson Avenue, Union City, N.J.

Walker 5-0606-07  
Union 4-1786

Agents for Canada:  
**The Knitting Machine & Supply Co. (Canada) Ltd.**  
2052 St. Catherine St. W., Montreal, Que.

Wellington 3-6442

**Synthetics****Cyanamid Fiber  
Introduced Nov. 30**

CHARLOTTE, N. C. — American Cyanamid Company's fibers division will present details of a new acrylic staple and tow, suitable for cross-dyeing with the company's present acrylic fiber, at the November meeting of the Piedmont Section, American Association for Textile Technology. The meeting, a dinner event, is scheduled for November 30 here.

The new fiber, Type 61, can be used in the production of high-bulk yarns. It is readily dyeable with basic and disperse dyes, but is not receptive to acid dyes. This will permit it to be cross-dyed in blends of 100 per cent Creslan acrylic fiber with the company's present fiber, to achieve a range of heather, stripe and pattern effects.

Somewhat whiter than the company's present acrylic, Type 58, the new fiber is now under evaluation in field trials. It can be readily processed on cotton, woolen, worsted and high bulk

systems, the company said. Cyanamid's presentation in Charlotte will feature a paper on the properties and processing of the new fiber by Dr. N. H. Marsh, technical director of the fibers division, and one by William H. Kieffer, director of marketing for the division, on the new applications and marketing potential.

Concurrently with the Charlotte presentation, details will be released in New York City at a press conference in the fibers division's headquarters. Dr. J. M. Salsbury, director of fibers research at the company's Stamford Research Laboratories, will present technical details and Martin B. Friedman, general merchandising manager, will review applications and marketing.

**Douglas H. Gordon Joins  
AVISCO Merchandising**

Douglas H. Gordon has joined the American Viscose Corporation's merchandising and product development department. He will be responsible for coordinating merchandising projects in the knitted outerwear field.

**JONATHAN RING  
& CO., INC.**

Hancock St. and Montgomery Ave., Phila. 22, Pa.

**Lamb's Wool  
FUR BLENDS**

**NATURAL**

**DYED**

**FOR YOUR 1962 LINE**

*Represented by*

**BENNETT M. BERMAN ASSOCIATES**

New York 16, N. Y.

Murray Hill 3-9237

**FRANK MORRISSEY**

Ardmore, Pa. Midway 2-3747



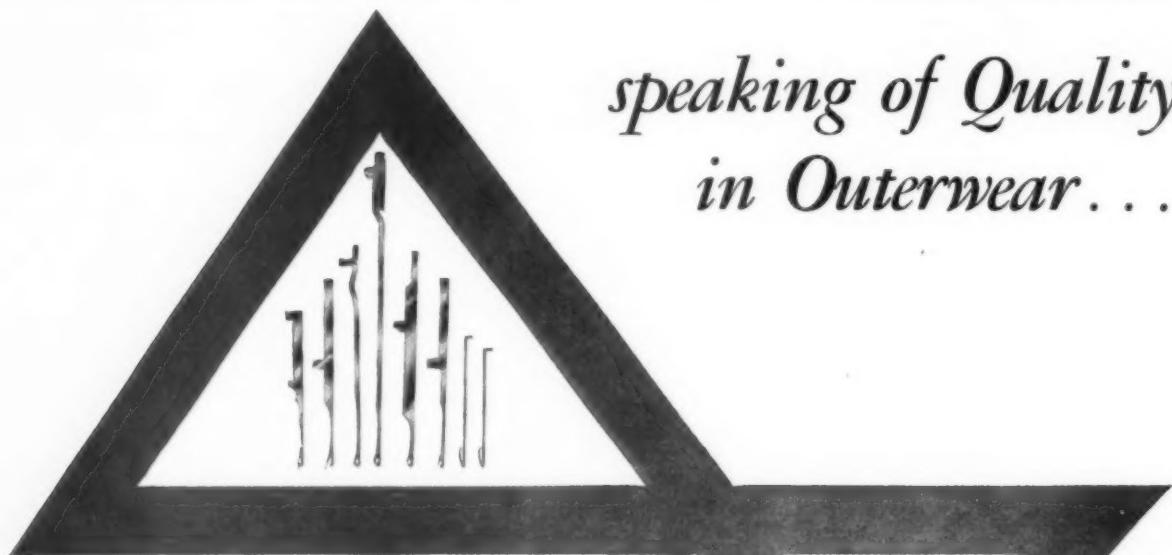
**DRAPER BROTHERS COMPANY**

*Established 1856*

MAIN OFFICE  
CANTON, MASS.  
CANTON 6-0029

YARN DIVISION  
NORTON, MASS.  
ATLAS 5-7711

*speaking of Quality  
in Outerwear . . .*



. . . a much over-used word, Quality! We let Groz-Beckert needles speak for themselves — on the machine, and in the finished fabric.

As original equipment or replacement on the world's finest machines, they produce the outerwear that *you* want — and your customers *expect*.



Groz-Beckert

ALFRED HOFMANN  
NEEDLE WORKS, INC.

3711 Hudson Avenue      Union City, N. J.

Soie N. Y. Metropolitan Agent:

NEEDLE SALES CORP.

3711 Hudson Ave., Union City, N. J.  
N. Y. Phone: YUkon 6-8727      N. J. Phone: UNNion 3-0200

Synth-

Chem-

Jerom-

Jerome promoted  
knitted a  
Chemstra-

In his  
double k  
will be en  
tinue to  
expanded  
both Acr

Prior  
Mr. Ed  
Cashmer  
tive assis  
the Pre

Vyrene  
Output

Produ  
States R  
N. C., co  
increased  
year.

Willia  
dent and  
company  
the expa  
started  
pace wi  
for Vyre



**Synthetics****Chemstrand Names Jerome B. Edelman**

Jerome B. Edelman has been promoted to supervisor, Acrlan knitted apparel merchandising, Chemstrand Corporation.

In his new responsibilities, double knits, jerseys and hosiery will be emphasized. He will continue to direct and develop the expanded sweater program for both Acrlan and nylon.

Prior to joining Chemstrand, Mr. Edelman was a partner in Cashmere Knitters and executive assistant to the president of the Premier Knitting Company.

**Vyrene Demand Raises Output Of Cotton Yarn**

Production facilities at United States Rubber Co.'s Gastonia, N. C., cotton yarn plant will be increased 35 per cent within a year.

William E. Clark, vice president and general manager of the company's textile division, said the expansion program will be started immediately "to keep pace with the growing demand for Vyrene, the company's new

synthetic elastic thread." The cotton yarn manufactured at Gastonia is used to cover Lastex and Vyrene thread.

**Courtaulds Adopts Sure Care Symbols**

Courtaulds (Alabama) Inc., producer of man-made fibers and finishes, has endorsed the Sure Care symbols developed by the National Retail Merchants Association.

In addition, it recommended that all manufacturers using Courtaulds fibers adopt the symbols.

**Consumer Benefits Seen**

Geoffrey V. Lund, director of textile research and development, said, "The symbols were devised and adopted by the NRMA to answer a specific need—that of giving full value to textile products by lengthening their life and maintaining their desired appearance through their proper cleaning and handling—something we owe the consumer. Here, at last is a method to give simple instructions to the consumer who is in a confused state induced by the multiplicity of fiber and finish names and claims."

**Dyeing****E. P. LeVeen Jr. Hails Dye Process**

**SPARTANBURG, S. C.**—Woodlyn Corp. has licensed two more firms in the woolen industry to use its process for producing multi-dye effects from one dye bath.

Lebanon Knitting Mills, Inc., Pawtucket, R. I., producer of worsted knitwear, will use the process to dye worsted jersey and worsted yarns.

Carleton Woolen Mills, Inc., Rochdale, Mass., manufacturer of wool fabrics, will use it for dyeing wool yarns. E. P. LeVeen Jr., spokesman for Carleton, said "The process represents a major breakthrough by achieving a variety of pleasing color effects in one operation, and producing a higher quality product with increased strength and a softer hand." Carleton plans to introduce a fall 1962 line based on color designs made possible by the process.

The Woodlyn process was originally recommended for dyeing worsteds. Continued research

by the Deering Milliken Research Corp. has established its application to woolens.

R. W. Wise, general manager of Woodlyn, said the process can be introduced at any stage of manufacture, in stock, top, yarn or fabric; and because of the important side effects of improved wearability, elongation and hand, it will be of interest in working with solid shades as well as multi-color or heather effects.

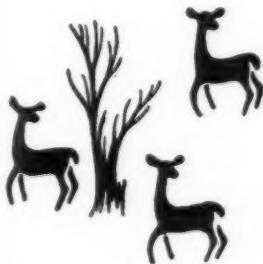
**Ciba Introduces Dye, Kiton Fast Blue FGL**

A new bright acid dye, Kiton Fast Blue FGL, has been introduced by Ciba Company, Inc. Greenish in hue, the blue dye has been developed for wool and nylon.

It exhibits, the company says, excellent build-up properties, very good light fastness on wool yarn and piece goods, as well as good solubility and excellent leveling properties.

The firm recommends it for dyeing Ban-Lon to minimize barre effects and to leave polyester fibers reserved.

Kiton Fast Blue FGL may also be used in Neolan dyebaths.



# FAWNTEX YARNS INC.

KNITTING YARNS — WEAVING YARNS

*Woolen Spun*

**ORLON® ACRYLIC**

LAMB'S WOOL/ORLON

FUR BLENDS

WOOL

MOHAIR BLENDS

300-322 BUTLER STREET, BROOKLYN 17, N. Y.

MAIN 5-1913

MAIN 5-2700

Swiss  
System  
Swat

ZURIC  
ser-Werk  
Switzerland  
system sa  
ficulties i  
knitted fa  
pany has  
getting o  
creased s  
five inche  
and acry

Under  
knitted s  
or mech  
stainless  
of about  
square.  
sample a  
cylinder,  
screws,  
stainless  
ing conta

The g  
in the dy  
ratory m  
shaft.

When  
be dyed,  
mechanic

*whatever the sewing machine...*



**STITCHLOK  
NYLON THREADS  
WORK  
ECONOMICALLY,  
EFFICIENTLY**



Whatever the stitch... STITCHLOK flows through your machine effortlessly, without a break or stop. Whatever the fabric... woolens, blends, slippery synthetics, elastics including stretch knits and stretch wovens... STITCHLOK seams swiftly, strongly, smoothly. Whatever your product... outerwear, wash 'n wear, lingerie or foundation garments, men's wear, women's wear, children's wear, sports and swim wear, heavy duty garments... STITCHLOK assures you the highest production efficiency your machine can provide with the most attractive synthetic thread seams ever produced. Write for samples, information & illustrated cartoon booklet.

Stitches stay locked in with

®Patented

**STITCHLOK**

SYNTHREAD DIVISION, THE MASON SILK CO., 40 EAST 34th STREET, NEW YORK 16, N.Y. • MU 3-5359  
Atlanta, Baltimore, Boston, New Haven, Chicago, Detroit, Los Angeles, San Francisco, Rochester, Philadelphia, Nashville, Tampa

MER

225 Vari

The H

## Swiss Firm Has System Of Dyeing Swatches Evenly

ZURICH, Switzerland.—Emser-Werke A.G., of Domat-Ems, Switzerland, has developed a system said to overcome the difficulties in even dyeing of small knitted fabric samples. The company has been concerned with getting evenly dyed and uncreased samples measuring about five inches square, of polyamide and acrylic fabrics.

Under the new system the knitted sample is sewn by hand or mechanical method on to a stainless steel gauze with a mesh of about 30 holes to a half inch square. The gauze with the sample attached is rolled into a cylinder, fixed in shape by screws, and dropped into a stainless steel washing and dyeing container.

The gauze may be agitated in the dye bath by a small laboratory motor with an eccentric shaft.

When larger samples have to be dyed, the company suggests a mechanically driven apparatus

consisting of rotating drum in a stainless steel container. For samples measuring about 30 by 50 inches, the cylinder is composed of removable gauze with a mesh of about 25 holes to the half inch square. The apparatus described by the company is capable of varying the rotation speed of drum and the actual dyebath can be heated by electricity or steam.

It is claimed that evenness of dyeing obtained by this method on both small and larger versions of the apparatus is very good. Shade equality on both sides of the pattern is also very good, but if dyes containing chromium in their molecules are used a strip of woven glass fabric must be placed between the metal gauze and the textile sample. If this is not done, the fabric side touching the gauze may become darker.

The finished sample, after the washing, dyeing and drying processes, is creaseless and flat. It is also shrunk after what the company calls this kind of thermosetting process.

It is usually difficult to machine sew knitted samples on to the gauze, so hand sewing is

(Continued on Page 69)

## QUALITY NOVELTY YARNS

Of course, we think so,  
But more important,  
Our customers tell us . . .  
That MERCURY is the  
House of Quality  
Novelty Yarns of all fibers.

Ask for samples

**MERCURY YARN COMPANY**

225 Varick St. New York City 14 - WA 4-4247

The House of Quality Novelty Yarns

**MERCURY  
YARNS**

What makes the difference in

## FUR BLENDS?

Finishing by  
"the Big J"

The difference between an ordinary finished product and a garment that glows with luxuriant softness is the difference between ordinary processing...and dyeing and finishing by Jefferies. Delicate even color... uniformity in the size of the garment...a hand that brings out the most desirable qualities of the fur...rich new loft. Let Jefferies do the job and you'll be delighted with the results.

**jefferies**  
Processors, Inc.

3344 Frankford Avenue  
Phila. 34, Pa.  
GArfield 6-5035

In the South:  
Albemarle, N. C.  
YUKon 2-4616



## His customers did it

They've got him so tied up for cash he can't move. What should he do? Just this: use Meinhard's factoring to provide cash on his sales and credit to customers. By using Meinhard's money, he gets full use of his own—free from paperwork, bookkeeping, collections and risk.

MEINHARD & CO., INC., 390 PARK AVE. S., N.Y. 16, N.Y. • LOS ANGELES • LONDON • ZURICH

**meinhard**  
Factoring  
Founded on  
Service

employed to overcome the problem of the edges curling. It is also said to be possible to immerse a rolled knitted sample into a starch solution and fix it with needles on to the gauze, with a piece of stiff cardboard underneath; after the sample has been dried by hot air it can readily be sewn on to the gauze.

Emser-Werke A.G. says that it has successfully used this method of dyeing samples for more than three years.

### Research Institute To Discuss Dyeing

PRINCETON, N.J. — A Textile Research Institute seminar will be conducted at 2:30 P.M. on October 26, 1961 in the Institute's Edward T. Pickard seminar room. The meeting, which is open to the public, is the second of the current series of seminars.

Mr. B. Sheldon Sprague and Mr. R. W. Singleton of the Summit Research Laboratories, Celanese Corporation of America, will discuss "Effects of Fiber Structure on Dyeability with Disperse Dyes."

### New Sandez Brown Dye Is Direct And Light Fast

Lumicrease Dark Brown 3LB Pat. has been added to the Sandoz group of extremely light-fast direct dyes. It is an homogeneous dyestuff, said to be suitable as a main element for brown shades, and as a shading color in the dyeing of cotton, rayons, linen, jute, sisal and hemp.

Because its fastness to light is unaffected by resin finishing, it is recommended by the firm for decorative fabrics and dress goods for working properties that include low salt sensitivity, freedom from sensitivity to hard water and level dyeing. Fastness to washing and water spotting are reported excellent when aftertreated with Cuprofix #52 or Sandofix WE.

### Chemicals

#### Alco Oil & Chemical Names John F. Headley

PHILADELPHIA, Pa.—John Frederick Headley has been elected to the board of directors of Alco Oil & Chemical Corp., producer of chemicals for the textile industry and others.

## MERRITT CO.

40 EAST 34 STREET

New York 16, N.Y.

LEXington 2-0797

## YARNS

### REPRESENTATIVES

FOR LEADING SPINNING MILLS  
PRODUCING QUALITY WOOLEN  
WORSTED, ZEPHYR AND  
BLEND YARNS FOR THE  
KNITTING TRADES

DOMESTIC

FOREIGN

## CITY-WIDE Offers You . . .

### Knit-goods "Know-how"

## DYEING

- Piece dyeing of Knitted Fabrics
- 850 lb. kettle lots
- Latest stainless steel equipment and controls
- Color uniformity

## FINISHING

- Specialty processes available — as per your requirements.

## PROCESSING

an exclusive washing process devoted to bring out the finest obtainable handle in all fibers and blends with the minimum oil content.

### Quality plus service

- When you specify "City-Wide" you are assured that experienced experts process every garment with the most advanced methods in a new, modern plant.

Phone: Michigan 1-3600  
or TWining 4-4584

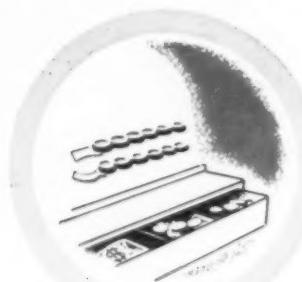
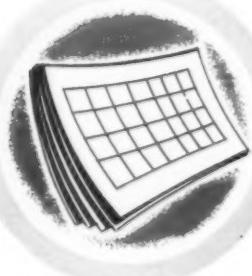
Samples Picked Up and Delivered.

**City-Wide**  
KNITWEAR PROCESSING CO., Incorporated

Temporary Address:

70-17 83rd St.

Glendale 27, N.Y.

**CASH****CREDIT****TIME**

Your business can be more profitable and you can be more productive, with the help of **MILL FACTORS'** financial triple protection service.

**MILL FACTORS** will shield you from fretsome time-consuming detail, guard you against creeping-credit customers, protect and promote your cash balance.

All this and much more too is explained in our booklet

"Toward More Profitable Operations", more exciting reading than a whodunit to the man whose eye is on the P/L statement. It's yours upon request, without obligation of course.

Or better still, if you're convinced that time is money, call us now to arrange for a meeting with one of our executives at your office.

If it has to do with money, remember — cash is the business of **MILL FACTORS**.



Mill Factors Corp., 380 Park Ave. South, New York 10, N.Y.  
Please send NEW FREE BOOKLET "Toward More Profitable Operations", a basic story on modern financial services.

NAME \_\_\_\_\_ Please Print

COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

# Triple Protection

with

## MILL FACTORS



• **MILL FACTORS**  
CORPORATION

380 Park Avenue South  
New York 10, N. Y. • LExington 2-9340  
CHICAGO • NEW YORK • MIAMI



Chem  
Geor  
Crown  
PROV  
Crown  
has app  
as vice p  
Southern  
its subsi  
pany, U.  
Until t  
Southern  
headqua  
S. C., off  
From  
was gen  
Patchog  
From 19  
presiden  
of North  
North C  
1945 to  
manager  
and fro  
was assi  
Metro-A

Offer  
For S  
ELIZA  
A new  
Flamepr  
marketed

G

M

PEOP

**Chemicals****George Sarti Joins  
Crown Chemical Co.**

PROVIDENCE, R. I.—Crown Chemical Corporation has appointed George W. Sarti as vice president in charge of the Southern operation, including its subsidiary, Cravenette Company, U.S.A.

Until the completion of a new Southern plant, he will make his headquarters at the Greenville, S.C., office.

From 1934 to 1937 Mr. Sarti was general manager of the Patchogue Dyeing & Finishing. From 1937 to 1945 he was vice president and general manager of North Carolina Fabrics, now North Carolina Finishing. From 1945 to 1953 he was general manager of Old Fort Finishing and from 1953 until now, he was assistant vice president of Metro-Atlantic.

**Offer Flameproofer  
For Synthetic Fiber**

ELIZABETHPORT, N. J.—A new flameproofing agent, Flameproof 462, is now being marketed by Apex Chemical

Co., Inc., to the textile industry. It is said to durably flame-proof acetate or other synthetics.

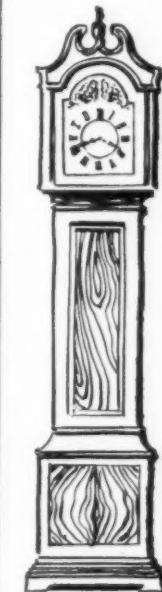
It is a clear liquid compound which emulsifies readily in water. Product application is recommended in the dyebath operation since the flameproofer is exhausted on the fiber in the same manner as a dyestuff. The formula for acetate is 15 percent on the weight of fabric; other synthetic fibers require larger amounts.

The product is not applicable to cotton or rayon.

**Laminates****Cranston Print Works  
Licensed By Reeves**

Reeves Brothers, Inc., manufacturers of Curon foam for textiles, has appointed Cranston Print Works, Co., 261 Madison Avenue, New York City, as a licensed laminator for the patented Curonized process of heat laminating.

The Cranston Company is equipped for lamination in its plant at Cranston, R. I. Expansion plans are now in progress for future installation of laminating equipment in its other plants.

**TIME-TESTED  
YARNS.....****WORSTED YARNS**

2/20—2/15—4/8—Roving  
Natural & Colors on Cones

**MOHAIR BLENDS**

Natural & Colors on Cones

**6 DENIER TURBO  
ORLON® ACRYLIC**

Natural & Colors on Cones

**ALBA YARNS, INC.**

41 UNION SQUARE  
NEW YORK 3, N. Y.  
ALGONQUIN 5-8955

GRANITE 4-5400

54th & POPLAR STREETS  
PHILADELPHIA 31, PA.

**Nathan Schwartz & Sons, Inc.**

Spinners of Yarn on the Worsted and Woolen Systems

**PIONEERS.....**

in spinning yarns from all  
of the man-made fibers . . .  
on both the **WORSTED** and  
**WOOLEN** systems

**FINE SPECIALTY YARNS**  
**CREATED FOR SPECIFIC END USES**



## HOW A TALCOTT FACTORING PLAN CAN GIVE YOU COMPETITIVE ADVANTAGES

Funds are readily available beyond the usual advance on accounts receivable for seasonal needs, for inventory, expanded sales and to finance mergers or retiring partners. Our liberal credit policies are determined by experienced credit executives who specialize in the textile industry. Our intimate knowledge of the unusual needs of this industry enables us to give immediate credit approvals. You can select new outlets for your merchandise without fear of credit problems.

To find out how a *Talcott Factoring Plan* can help you —  
**TALK TO TALCOTT.**

*For booklet "Four Keys to Business Growth," write to Joseph A. Zeller, James Talcott, Inc., 225 Park Avenue, South, New York 3, New York.*



### James Talcott, Inc.

225 PARK AVENUE SOUTH, NEW YORK 3, N.Y. ORegon 7-3000

Other offices or subsidiaries:

CHICAGO • DETROIT • MINNEAPOLIS • BOSTON • ATLANTA • LOS ANGELES • SAN FRANCISCO

### Trade Education

## Pekoma Plans Knitting Classes

PHILADELPHIA, Pa.—An educational program planned by the Knitted Outerwear Manufacturers Assn., Pennsylvania District, is expected to be approved by the group's board of directors.

Tentative plans call for 15 sessions of two hours each on alternate Wednesday evenings at the Philadelphia College of Textiles and Science. The program is scheduled to start early in November and to continue till the end of May 1962, has been planned by Joseph Specker and Dr. Edward B. Shils, president and executive secretary, respectively, of Pekoma, along with members of the association's education committee.

Instructors include: Dr. Robert P. Brecht, a member of the faculty of the University of Pennsylvania; Dr. William Gomberg, former head of the ILGWU, industrial engineering department; Dr. Edward B. Shils, executive secretary of Pekoma; Charles Reichman, editor of KNITTED OUTERWEAR TIMES members of Pekoma, and engineering consultants.

Subjects to be covered include organization and management of the knitting mill; selection and recruitment of workers and supervisors; production planning, sales and order department operations; sewing department standards; knitting department standards; efficient plant layout of a knitting mill; costing and record keeping; industrial engineering; union-management relations; quality control; training in the plant and office; supervision in the plant and office (human relations); plant layout, fuller mechanization and automation; job evaluation and wage and salary administration, and office management and administration.

\* \* \*

PHILADELPHIA, Pa.—Angelo Sabatini, instructor of the Power Sewing Machine program at Dobbins Technical High School (Evening Division), reported that classes started with the full complement of students. He also said there is a waiting list of some 14 students.

**Trade Education****Class For Mechanics  
Given Nov. 4-Dec. 23**

PHILADELPHIA, Pa.—A course for knitter mechanics will be given at the Philadelphia College of Textiles and Science and the Wildman-Jacquard Company plant in Norristown, Pa. on 9 A.M. to 5 P.M. Saturdays from November 4-December 23. Enrollment will be limited to 12 students.

The course will cover the analysis of knitted outerwear fabrics, knitted fabric design, and the mechanical operations of Wildman-Jacquard TA-4, TJ1-12 and LH-6 machines. Special attention will be given to the timing of the automatic devices, including the control stand, Jacquard automat and drive mechanisms, electrical trouble shooting and the preparation of Jacquard pattern and control cards.

M. Petko and A. Anderson, of Wildman-Jacquard, and Professor Thomas Edman, head of the knitting department of the college, will be the instructors. The tuition is \$100.



Plain ribbing outlines a Chanel-type jacket-sweater knitted in a self-textured diamond pattern.

**Imports****Study Profit Relationship**

PHILADELPHIA, Pa.—The effect of imports on shrinking profit margins of domestic manufacturers was pointed up here (Continued on Page 75)

**HEMCO**  
*sportswear*

for  
men  
and  
boys

Offering a full line of  
Terry Jackets, Beach Jackets,  
Cabana Sets, Deck Pants  
and Surfers.

Also, a complete line of WALK SHORTS

*See our original  
1962 styles first!*

**HENDEL**  
MFG. CO. INC.  
New London, Conn.  
Gibson 3-4353

New York Sales Office: 1270 Broadway  
Los Angeles: 1244 So. Grand Ave.

# all these firsts...

## HAVE MADE ALLEN KNITTING MILLS THE FIRST IN 100% ACRILAN® ACRYLIC JERSEYS

**FIRST** 100% ACRILAN Jersey

**FIRST** "REDMANIZED"® Jersey of ACRILAN

**FIRST** Jersey in hi-bulk ACRILAN

**FIRST** in hi-bulk ACRILAN fancies and stripes

**FIRST** in yarn-dyed ACRILAN

**FIRST** in worsted-spun ACRILAN

**FIRST** in Type 16 ACRILAN

**FIRST** with Allenella Jersey Prints

**FIRST** with Eleganté—highest-quality Jersey knitted of worsted-spun Acrilan available in 2-denier

**FIRST** with SCOTT Apparel FOAM Eleganté—Eleganté with SCOTT Apparel FOAM bonded to it, creating new horizons for outerwear manufacturers

Allen Knitting Mills produced the first 100% Acrilan Jersey. Manufacturers asked for more... and more. Allen turned out, not only more—but entire new concepts in ACRILAN Jersey listed above.

Whatever you manufacture in Jersey, one or many of the ACRILAN Jerseys listed here can bring *you* "firsts" in peak sales. Come in and consult with us... we'll show you how the inventiveness that produced all these famous Allen "firsts" can work for you!

**ALLEN KNITTING MILLS, Inc.**

1412 Broadway, New York 18, N.Y.

at a two  
by the  
Bank &  
ageme  
Hamilton

The  
study o  
profit s  
years.

The  
pressure  
on indu  
increas  
costs a  
difficult  
petition  
to com  
here.

Since  
increas  
pointed  
121 p  
have i  
ports

Woo  
U. K  
Plec

LO  
than 3  
wool  
dinner  
eration  
night  
W. T  
greate  
fiber—

Spe  
he sa  
told  
wool  
moder  
tom c  
who  
pound

"Fe  
out pr  
a girl  
Hunte  
mean

Ac  
tile d  
a pil  
with  
Secre  
1962

Ba  
cent,  
corre  
comm  
very

Brita  
trade  
cause  
mark  
eratio

THANK YOU  
FROM  
**TEXTILFOAM, INC.,**  
its Stockholders, its Employees, and its Executive Staff,  
FOR MAKING US  
**FIRST and FOREMOST in LAMINATING  
FOAM to FABRIC**

We are First in Laminating . . . Polyester foam to knitted fabric, to woven fabric, to vinyl, and all forms of commercial lamination and embossing.

Our new plant located at 200 Clifton Blvd., Clifton, N. J., with its production capacity of 70,000 yards per day, permits us the luxury of assuring you immediate delivery during the peak periods when it's needed most. Our personalized service consists of both wet and dry laminating, finishing and stripe setting, splitting opening and removal of center crease, boiler facilities for all processes requiring steam, Tenta-frames and other

modern textile curing.

Quality control is insured by inspection of all incoming materials. All measuring of fabrics is done on Tru-Meter measuring machines. Our fully equipped laboratory includes dimensional stability testers, testers for bond strength and fadeometers. This, combined with our 8 individual laminating machines, each specializing in its own fabric for perfect bondability and uniformity, utilizing either the wet or dry process, assures and insures you of the best possible service by the FIRST laminator in the country.

---

TEXTILFOAM, INC., 200 Clifton Blvd., Clifton, N. J.

New York: PE 6-6528, New Jersey: GR 2-5400

---

at a two-day seminar sponsored by the Provident Tradesmen Bank & Trust Co. and the management firm of Booz, Allen & Hamilton.

The seminar was based on a study of how to overcome the profit shrinkage of the past 10 years.

The group was told that the pressure of foreign competition on industry profits will probably increase because rising U.S. costs are making it increasingly difficult to ship abroad in competition with other nations and to compete with foreign firms here.

Since 1950 total exports have increased 70 per cent, the study pointed out, while imports rose 121 per cent. Textile exports have increased 23 per cent, imports 61 per cent.

### **Wool Promotion**

#### **U. K. Woolmen Hear Plea For Promotion**

LONDON, England—More than 300 guests from the British wool industry at the annual dinner of the British Wool Federation in Bradford, Yorks, tonight heard their president, W. Trevor Hunter, call for greater use of "the miracle fiber—wool."

#### **Need Modern Image**

Speaking of wool promotion, he said that market researches told them that the industry's wool products must have a modern image to attract the custom of today's young people—who had around 17 million pounds a week to spend.

"For an industry to be without promotion is like winking at a girl in the dark," said Mr. Hunter. "You know what you mean but she doesn't."

Accordingly, the Wool Textile delegation has worked out a pilot scheme in cooperation with the International Wool Secretariat for the spring of 1962.

Bank rate reduction of half per cent, with its implication of a corresponding modification in commercial borrowing rates, is very welcome at a stage when Britain's vast wool importing trades are seasonally active because most of the world wool markets are now in full-scale operation. There is no modification as yet in the restriction of com-

mercial credit facilities. These need to be relaxed before importers can be as active as they might wish.

New business in tops remains quiet as the financial conditions governing UK internal trade are such as to cause users to run down their working stocks of materials. They draw on contracts already placed for supplies, rather than deposit further orders for supplies.

It is commercially estimated that the order book position of the U.K. wool textile industry has possibly been shortened by one month under current conditions. This brings measurably nearer the stage at which further bulk buying in tops and yarns will become a commercial necessity.

For the moment, merino top quotations are reduced by 1d per lb. compared with last week, but are firmer on the lower basis. Quotations are approximately: 70s "A," 111d; 64s "A," 105d; 64s "B," 103d; 60s super, 95d; 58s super, 92d; 56s super, 89d; 50s carded, 77d; 48s, 73d; 46s, 72d.

#### **New Zealand Woolmen Votes J. D. Acland Head**

AUCKLAND, New Zealand—The New Zealand Wool Board has re-elected J. D. Acland chairman, and A. Briscoe Moore deputy chairman for the coming year.

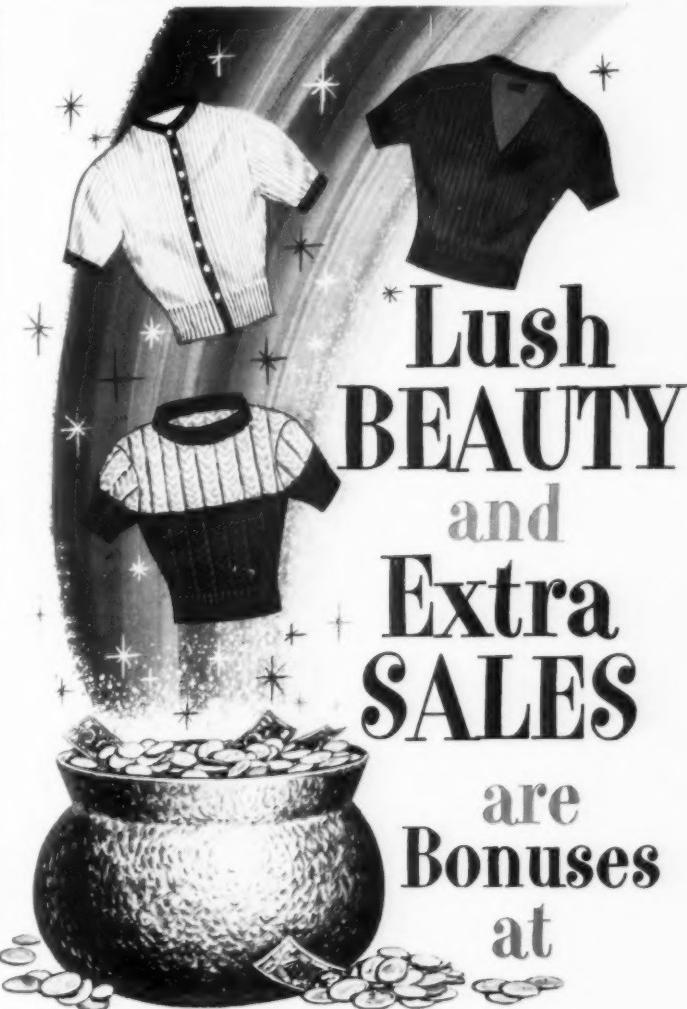
Mr. Acland also is vice-chairman of the board of the International Wool Secretariat and member of the board of directors of the Wool Bureau, Inc., New York City.

#### **Yarn Suppliers**

#### **R. W. Hasselle Promoted Aberfoyle Administrator**

J. S. Kenrick, senior vice president of Aberfoyle Manufacturing Company, has announced that Mr. R. W. Hasselle has joined the firm's administrative organization as executive assistant, Southern Division to the senior vice president. Aberfoyle spins cottons, synthetics and blended fibers and dyes and mercerizes.

For the last four years Mr. Hasselle has been working for the firm as a salesman with the C. D. Cott Company, Chattanooga, Tennessee.



\*  
**Lush  
BEAUTY  
and  
Extra  
SALES  
are  
Bonuses  
at**

## **DYECRAFTSMEN**

Stand at a counter where sweaters sell fastest, you will see the Best Sellers have, invariably, been dyed by Dyecraftsmen. For good reasons: the high loft we give to wool, man-made fibers and blends, plus the beautiful colors we produce to motivate your customer's selection. It costs no more to have your yarns dyed at Dyecraftsmen. Dyecraftsmen's highly skilled know-how, modern equipment and reliability assure you quality results.

#### **SPECIAL OFFER**

To prove that there is a difference in the dyeing of yarns, we will gladly dye a sample lot so that you may compare results. Cash-in on COLOR. Come to the masters.



#### **DYECRAFTSMEN, INC.**

*Master skein dyers and bleachers*

349 Lincoln Street, Hingham, Massachusetts

Riverview 9-1141, 1142

## **Yarn Spinners Predict Increase; Double-Knits Gain**

PHILADELPHIA, Pa.—Yarn manufacturers contacted here, report mounting interest in two phases of the industry. One points to the satisfaction of greater production, in many cases, with the addition of larger equipment, and the other sees a stepped-up demand for double-knit fabrics.

William A. Irving, member of the firm of James Irving & Son, Inc., Chester, Pa., producers of woolen synthetic yarns, said a noticeable demand in this industry during the past year has been for larger equipment aimed at increased production.

Mr. Irving pointed out, although his firm is a custom yarn mill and has thus eliminated the necessity of an inventory, it is still concerned with advanced production facilities.

Mongolian cashmere and fur fibers of many kinds are produced here, he said, but at the same time our firm handles just about every fiber with the ex-

ception of cotton. "We generally have seven or eight different fibers in production at all times," he said.

A greater demand for double-knit fabrics for the year ahead is predicted by Warren T. Kent, of the Kent Manufacturing Co., Clifton Heights, Pa., makers of dry spun worsted yarns, woolen yarns and fabrics.

Although this trend for fine grade and fine count spinning started in this country about three years ago, said Mr. Kent, it has really gained momentum during the past year.

This offers a tremendous opportunity, according to Mr. Kent, to the mills which are equipped to do this type of fine spinning. Imported wool has been given the most emphasis, to date, in this field, he said, but now domestic fibers "are beginning to take hold."

### **Herbert Tucker Named**

WINSTON-SALEM, N. C.—Herbert S. Tucker has been appointed secretary-treasurer of the Duplan Corporation.

He has been with Duplan for 30 years, previously serving as comptroller.

### **Testing**

## **New Unit Tests Tension Of Fiber**

WEST POINT, N. Y.—The development of a new high speed tester capable of determining the tensile properties of single fibers at elongation rates in excess of one million per cent per minute was disclosed here at the fall meeting of the Fiber Society.

The equipment was developed by Fabric Research Laboratories, Dedham, Mass., for Celanese Corporation of America, Summit, N. J.

### **Diflers From Others**

According to Henry M. Morgan, co-author of the paper, "The new tester (unlike previous testers) operates within the range of velocities and strain rates that fibers are subjected to during processing from the fiber through to the finished fabric stage."

"Although at present the tester is being operated in the lower regions of processing velocities, reliable predictions can be made of fiber performance at the upper limits of processing speeds," said

Robert W. Singleton. "In fact plans are underway to modify the tester to operate at the higher speeds approaching 150 feet per second."

### **Oscilloscope Included**

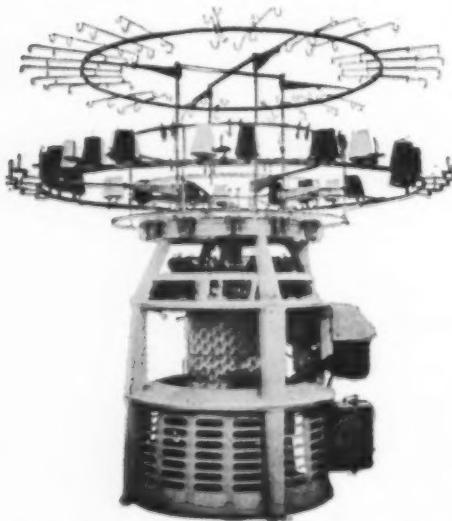
The basic design of the equipment consists of a gas-driven piston with a crystal force transducer for a load cell, and has incorporated in the system an oscilloscope for recording the information.

The tester has proved useful for examining viscoelastic properties of fibers as a function of testing rate, particularly at the combinations of higher strain level and short time experienced in processing which are not obtainable by conventional testers.

### **Award Given**

The first Fiber Society award for distinguished achievement in basic or applied fiber science was presented here to Dr. Milton M. Platt at the annual banquet.

Dr. Platt, vice president and associate director of Fabric Research Laboratories was cited for his contributions during 15 years with the laboratories, particularly in a better understanding of fabric engineering.



**STITCH TRANSFER MACHINES  
HAND FLAT KNITTING MACHINES  
NEEDLES and ACCESSORIES  
EARLY DELIVERIES**

## **TRICOMA, INC.**

7504 Empire State Bldg.

New York 1, N. Y.

Tel. Wisconsin 7-7466-7

Showroom: 303 Stockholm St., Brooklyn 37, N. Y.

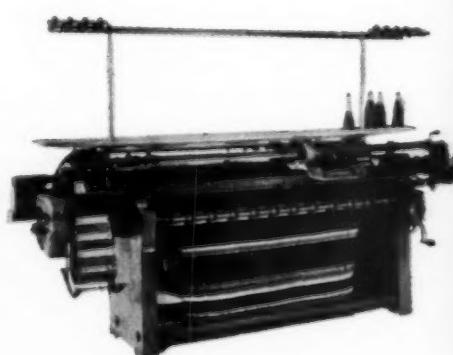
Tel. Glenmore 6-0205

**Exclusive Agents for the United States and Canada of:**

### **ALEMANNIA-SEYFERT & DONNER**

Western Germany

Fully automatic single lock flat power machines, 3-14 cut, 64" and 71" needlebeds, for garments and trimmings



### **GEORGES LEBOEY & CIE. France**

Circular machines for Jacquard, Double Jersey, Links/Links, Interlock and Eightlock fabrics and garment lengths

"In fact  
modifys  
the higher  
feet per

ded  
the equip-  
s-driven  
ce trans-  
and has  
stem at  
ing the  
d useful  
c proportion  
at the  
strain  
experienced  
not ob-  
testers.

y award  
ment in  
science  
Milton  
banquet  
ent and  
eric Re-  
s cited  
ring 15  
stories,  
under-  
engineering.

of:

**Equipment Firms****Retired Head Still  
With Butterworth**

PHILADELPHIA, Pa. — J. Ebert Butterworth, who retired September 30 as president and chairman of the board of H. W. Butterworth & Sons Co., Bethayres, Pa., will continue with the company as a consultant and member of the board.

A successor to Mr. Butterworth will be named at the next board meeting.

The firm, founded by Mr. Butterworth's great-great grandfather in 1820, designs and manufactures a variety of heavy machinery, including textile machines, and is sales representative in this country for Joh. Kleinewefers Sohne, Krefeld, Germany.

Mr. Butterworth has been active with the firm throughout his business career. He was instrumental in establishing the company's first Southern office in 1923. He worked in the South until 1930 when he returned to the home office to serve successively as sales manager, vice president and treasurer. He became president in 1952, succeeding the late Harry W. Butterworth Jr., who retired.

Mr. Butterworth also was largely responsible for the firm's emphasis on research and development, its overseas sales and subsidiaries and the organization of the American Textile Machinery Association, whose board he has served on since its inception.

Mr. Butterworth served in both World Wars and has among his decorations the Legion of Merit for his work in carrying out the civilian supply program in the Mediterranean Theater in the second World War. He is generally known as Colonel Butterworth.

**Adams Zeller Will Build  
Second Drying Unit Plant**

GLENDALE, Pa.—Based on an increase in sales of drying machinery in the last quarter of 1960 and the first six months of 1961, the Adams/Zeller Corporation has begun construction of a new plant at Ivyland, Bucks County, Pa., to be completed in late fall.

The company, established in

1959, has had a rapid growth with an increasing backlog of orders, according to A. M. Zeller, president. The new plant, on a six and one-half acre tract adjacent to the Johnsville Naval Air Station, will have 15,000 square feet of manufacturing space, and 3,000 square feet for offices and engineering. A second plant, in the Germantown section of Philadelphia, with 22,000 square feet of manufacturing space, will be maintained.

**Knitted Yardgoods****Canadian To Head  
Lawford Fabrics, Inc.**

Alan C. Salter, president of Textile Sales Limited of Canada has been elected chairman of the board and chief executive officer of Lawford Fabrics Inc. His principal concern will be finance and manufacturing. Other officers are Lawrence Gabbe, president; Richard Clarenbach of Textile Sales Limited of Canada, vice president in charge of manufacturing; Tom Bolger, vice president in charge of sales; Sanford Elias, secretary; David C. Salter of Textile Sales Limited, of Canada treasurer and Jean Picard.

Lawford will now turn to the production of woolens as well as worsteds. The first line of woolens will be ready this Fall.

**Financial****White Stag Manufacture  
Declares Stock Dividends**

PORLAND, Ore. — White Stag Manufacturing Co. has declared a regular quarterly dividend of 25 cents per share on all Class A common stock and 7½ cents per share on Classes B-3 through B-5 common stock, payable on November 15 to stockholders of record November 1, 1961.

The board also declared a dividend of \$1.12½ per share of preferred stock payable December 1 to preferred stockholders of record November 17, 1961.

**Errata****Photo Miscaptioned**

A photograph of George Miller, president, Scott & Williams, Inc., was erroneously captioned Arthur M. Lowenthal, in a story on page 27 of the October 16 issue of the Knitted Outerwear Times on the retirement of Mr. Lowenthal from Max Lowenthal & Sons.

**KEYSTONE**  
...YOUR  
TO  
*Color-Correct  
Dyeing*  
OF  
ALL KNITTED FABRICS  
(Synthetics & Blends)

Keystone special processes  
assure color uniformity,  
quality and hand  
that have set a  
new industry  
standard.

**KEYSTONE**  
DYEING COMPANY, INC.

3213-23 Amber Street, Philadelphia, Pa. • REmington 9-2575

Southern Representative:

COLLINGWOOD, IBACH & CO., 205 So. Church St., Charlotte 2, N. C.

**AATCC****Discuss Cellulose Reactants Oct. 20**

Cellulose reactants were discussed by a panel at the October 20 meeting of the metropolitan section, AATCC, at Kohler's Swiss Chalet, Rochelle Park, N. J.

Dr. George S. Wham, director of research and development, Phillips-Van Heusen Corp., was moderator. Members of the panel included Dr. Wendel F. Munro, American Cyanamid Co., Bound Brook, N. J.; Charles R. Williams, textile resin department, Monsanto Chemical Co., Springfield, Mass.; Henry R. Hushebeck, Joseph Bancroft & Sons Co., Wilmington, Del.; and Louis J. Villa, Associated Merchandising Corp.

Future meetings of the Metropolitan Section for the '61-'62 season will be as follows:

November 17—Suburban Golf Club, Union, N. J. This meeting will feature a plant visit to the Shell Chemical Company Laboratories at Union, N. J.,

at which time the following lectures will be presented by Shell Chemical Co. personnel: "Radio Tracer Methods in the Textile Industry" by R. E. Murdock; "Laboratory Evaluation of New Creasproofing Agents Using Statistical Techniques" by G. R. Ferrants; and "Effect of Alterative Desizing Techniques on Properties of Various Fabrics" by H. W. Eastwood.

January 16—New York, N. Y. "Costs" by D. M. Lewis, Colonial Piece Dye Works.

Feb. 16—New York City. Open.

April 13—Ladies Night meeting. Mrs. Margaret Ingersol, Vogue Magazine, guest speaker.

**AATT****Jack Larsen, Executive Designer, Speaks Nov. 1**

Jack Lenor Larsen, president, Larsen Design Corporation, will speak on "Design for the Future Is Total Design" at the November 1 dinner-meeting of the American Association for Textile Technology in the Hotel Vanderbilt.

**Double Knit Trends Seen In Manchester**

(Continued from Page 35)

the length of yarn required for the loop and finally fashion the yarn into a loop. Positive feed by relieving the needle of the first two tasks, restores to it its original purpose as a loop-forming instrument."

The types of positive feed devices which manufacturers have fitted to their double knit machines vary in design. Despite the variations in their construction, all positive feed units, however, operate on the same basic principle.

Typical of the positive feed units on display here is the type being shown by Triplite Ltd., of Leicester. The company describes this device as "a system whereby a number of wheels to suit the number of yarns are mounted around a ring and all are engaged and driven by a strong nylon tape or band which in turn is driven by a quality wheel."

Since the wheel is driven at a required machine ratio, a change in the diameter of the wheel will

result in a change in tape speed. The yarn in movement to the carriers at each feed passes between the tensioned nylon tape and its feed wheel.

Positive feed devices can be attached to either revolving cylinder or revolving cam box single-purpose machines. At the present time they are not applicable to fancy rib jacquard machines where a multiplicity of different colored yarns are fed to groups of needles in the cylinder and dial.

By means of positive feed, it is claimed, it should be possible for a manufacturer to produce knitted fabric of consistent quality and readily predict the knitting quality of the fabric. This is done by means of the following formula: Circumference of the feed wheel multiplied by the number of times in one revolution of the machine should equal the course length.

**New Machines**

Apart from the machines described briefly in last week's report, the new double knit yard-goods machines on exhibit here

(Continued on Next Page)

*This is an*

**EXCLUSIVE NEW MODEL**

*built especially  
for*

**KNITWEAR****U. S. MODEL 99-KS**

*for every felling operation on  
knitted outerwear . . . around  
necks; around arm holes; hems bottoms —  
all with an elasticized stitch that stretches.*



**U. S. blind stitch machines are Unquestionably Superior**

**U. S. BLIND STITCH MACHINE CORP.**

231 West 29th Street

New York 1, N. Y.

Lackawanna 4-9144



this week included the new Stibbe Century, and the Bentley 5/RJ, 5/RGS/3 and 4/RH. The trend, in the case of single-purpose yardgoods machines, has been to increase the number of knitting feeds and, on the multiple-purpose models, to broaden the pattern scope.

The Stibbe Century is an example of the latter. This machine is not exactly brand new in the precise meaning of these words. It is an offshoot from the company's 99 range of machines; more specifically, the Stibbe 99/36. With the same 36 feeds as on the 99/36, the Century has a larger patterning scope; it has been increased from 37 to 49 steps. The machine comes in up to 18 x 18 needles per inch and embodies a slightly different pattern drum system from the Berridge method with which other Stibbe models are equipped.

Another improved older model that is on view here is the Leboccy NOPAVIT. This machine, which is a pattern wheel unit, has now been fitted with 12 two-color stripers which can, if necessary, be increased to 24. The three Bentley units also represent expansion of models in

the company's existing range of machinery. The 5/RJ is a 30-inch diameter rib jacquard machine equipped with 24 feeds. The machine has the same type of spring jack and presser as on the well-known Bentley RTR. The scope of the 5/RGS/3 has been enlarged to embody 24 peg drums instead of the previous 12 peg drums. The stitch scope of the 4/RH is based on pattern wheel selection. The machine is a 30-inch diameter unit equipped with 36 knitting feeds.

Considerable resentment over holding the 1961 Knitting and Ancillary Machinery Exhibition in Manchester was encountered in talks with many U. S., Continental and even British visitors to the show.

#### Shortage of Rooms

Hotel space here has been in frightfully short supply all during the 11 days the show has been running. But even worse, the limited number of rooms available were in many instances far below minimum U. S. and European hotel standards. As a consequence, many visitors cut short their stays here.

For some, visiting the show involved considerable travel each

day. With hotel rooms in the center of the city at a premium many were forced to seek accommodations in neighboring communities as far distant as the seaside resort of Buxton, some three hour auto drive away. Manchester has only three comparatively large hotels, of which only one can be regarded as approaching a first-rate hotel in character.

Manchester exhibitors too have reacted adversely to the poor accommodations available here. In some instances their expressions of annoyance and dismay were a reflection of their own discomfort; in others, it was a reflection of the opinions of their customers.

"Manchester is a shocking place to hold a knitting machinery exhibition," a London knitwear producer stated. This view was echoed by a South African hosiery manufacturer and, of course, by numerous North American knit goods producers.

The suggestion was advanced by a number of visitors and exhibitors that in planning the next show the exposition authorities consider holding it at Earl's Court in London.

"There are ample first-rate

hotels in London and many of the difficulties encountered here in Manchester could be easily avoided if the site of the show were moved to Earl's Court," a Leicester knit goods manufacturer said.

#### Personals

#### M. Rothkopf's Touring England, Germany

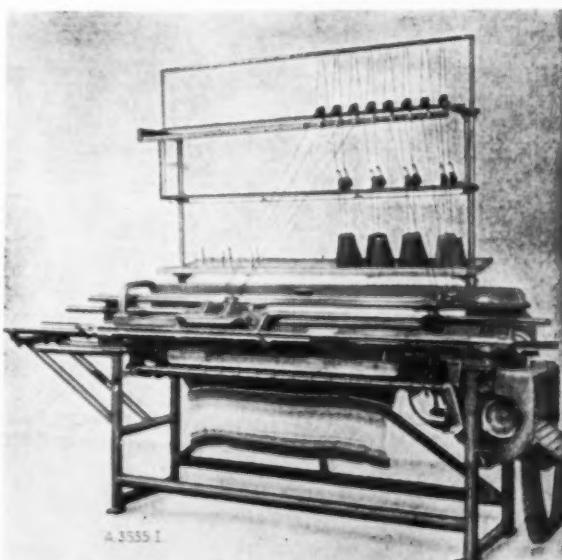
M. Rothkopf, president, Mac M. Rothkopf & Co., Inc., exclusive U. S. agent for Mayer & Cie of Taifligen, West Germany and McRoth Needle Co., is on a three week tour of Europe. He left the U. S. October 9.

His visits will include a trip to the factory in Germany to examine the new machinery and innovations which Mayer & Cie is now developing. They also included an extended stay at the Knitting Machine Exhibition in Manchester, England.

Mr. and Mrs. I. Freed, Vice President of London Knitting Co. and Starlight Mfg. Co. of Philadelphia are accompanying Mr. and Mrs. Rothkopf.

- "DC"** for bottoms, cuffs and novelty trimmings
- "DSC"** with independent high or low butt selection for novelty trimmings
- "DRC"** with independent high or low butt selection and stitch transfer.  
Novelty trimmings with lacy effects
- "BAN"** Jacquard and Rib Intarsia garments or collars
- "BARB"** for full fashioned collars, Jersey Intarsia sweaters
- "CAL"** for true cable stitch patterns, Links and Intarsia garments

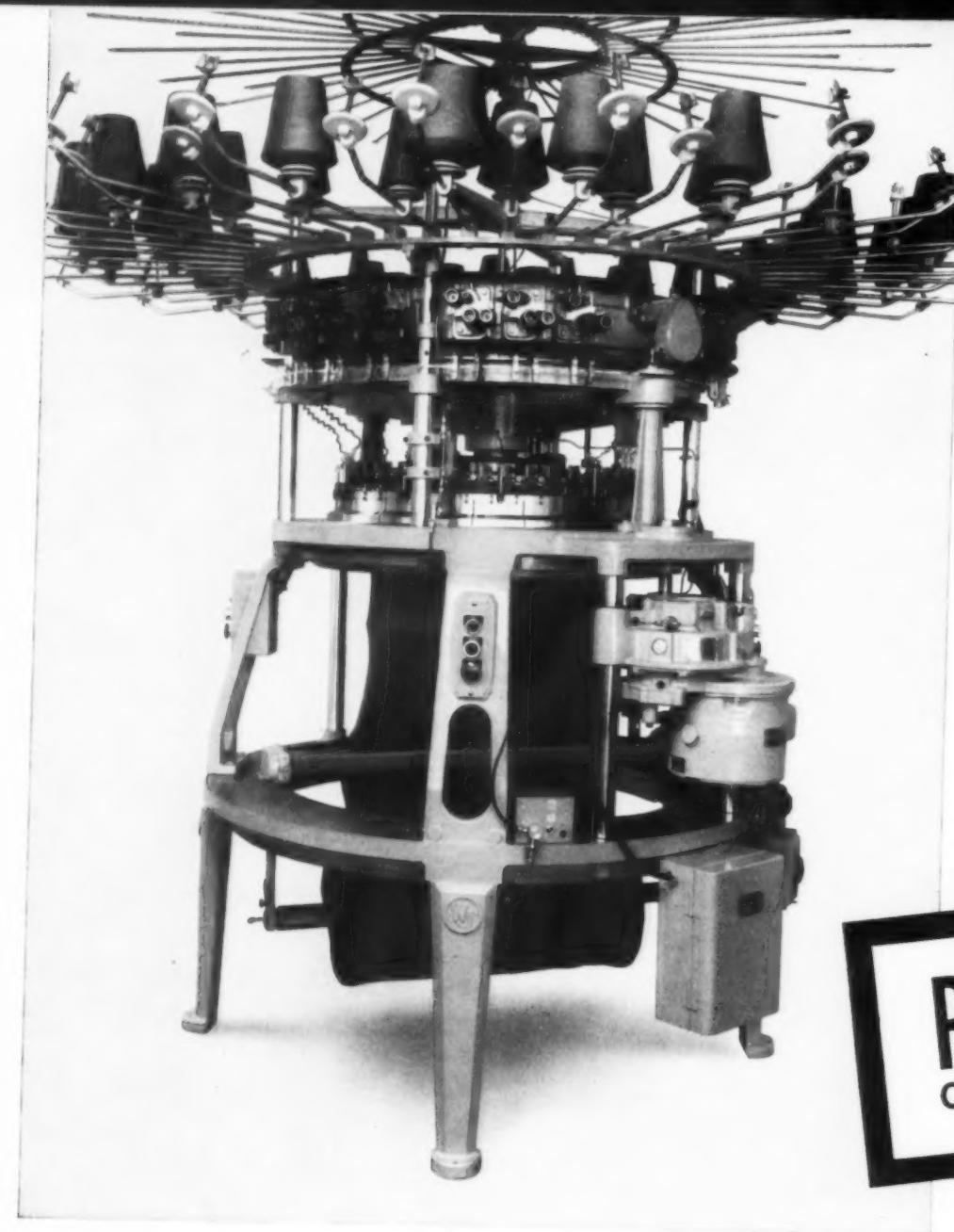
**NOW AVAILABLE WITH 2 SPEED MOTOR**  
*allowing the knitting of the slack course at reduced speed*



A 3535 I  
94 YEARS OF LEADERSHIP

**DUBIED**  
**MACHINERY CO.**

21-31 46th Ave., Long Island City 1, N. Y.  
Ravenswood 9-6361



**PBP-44  
CHALLENGER**

## PRESENTING THE "CHALLENGER"

Added to Wildman Jacquard's fine family of knitting machines is the all new 30" diameter, 44 feed "Challenger".

The "Challenger" is a high production yard goods circular knitting machine for the production of double

pique fabrics. Its rugged, modern styled frame, together with a new heavy dial support stem, provides the rigidity so necessary for the high production of quality fabrics.

Rearrangement of the needles or dial sections (which are made inter-

changeable) enables the following fabrics to be produced: double pique, Swiss or French knit . . . single pique . . . eightlock . . . full rib . . . multi-color checks or block plaids . . . the various tuck effects . . . double jersey . . . French welt fabrics and stripes.

## WILDMAN JACQUARD

WILDMAN JACQUARD CO. • 1210 STANBRIDGE ST. • NORRISTOWN, PENNA. • MANUFACTURERS OF HEMPHILL BANNER KNITTING MACHINES  
 A Subsidiary of Draper Corporation, Hopedale, Mass.  
 Manufacturers of the only circular knitting machines using a true Jacquard patterning mechanism

**Wool Review****Excellent Close  
Of '61 Foreseen**

(Continued from Page 5)

from corresponding 1960 levels.

Wool yarns consumed in knit cloth for sale during 1960 experienced the second successive annual recovery from the 1958 low-point of 9.4 million pounds. The 11.4 million pounds consumed in 1960 represented 22 per cent of the total domestic consumption of wool knitting yarns and the chief product of this class dress and suiting fabrics, took 8.1 million of the total.

It is especially significant, in the light of gains made by 100 per cent woven wool apparel fabrics during 1961, that all wool yarns accounted for 93 per cent of 1960 wool yarns consumed in knit cloth for sale as compared with a low of 87 per cent in 1957 (See Table 3 in next column). While 1961 data will not be available for another nine months at least, presumably the increase over

**TABLE 3**  
**WOOL YARNS CONSUMED IN PRODUCTION  
OF KNIT CLOTH FOR SALE**  
**Thousands of Pounds**

Year	Total	Quantity		Per Cent of Total	
		All Wool	Wool Mixtures	All Wool	Wool Mixtures
1949	10,339	9,952	387	96	4
1950	15,226	14,696	530	97	3
1951	10,994	10,069	925	92	8
1952	15,241	13,992	1,249	92	8
1953	15,069	14,136	933	94	6
1954	14,989	14,068	921	94	6
1955	14,070	13,393	677	95	5
1956	13,549	12,215	1,334	90	10
1957	10,313	9,011	1,302	87	13
1958	9,371	8,686	688	93	7
1959	9,676	8,789	887	91	9
1960	11,394	10,555	839	93	7

Source: U. S. Bureau of the Census.

last year in woolspun knitting yarns for sale during the January-July period must be going into the knit cloth market, as sweater shipments declined.

Hand-knitting yarns, hosiery and seamless knit gloves accounted for the remaining 21 per cent of wool knitting yarns

consumed domestically in 1960. The first of these product classes appears to be in a rising trend, the second somewhat irregular, while gloves made of wool yarns are in a sharply declining trend.

Interfiber competition in knitting yarns has expanded sharply in recent years. The various

acrylic fiber producers have developed specific types of yarns to compete with the innumerable types of wool yarns available for every weight, construction and quality of knitwear.

Because spinning is one or at most two steps removed from (Continued on Page 83)

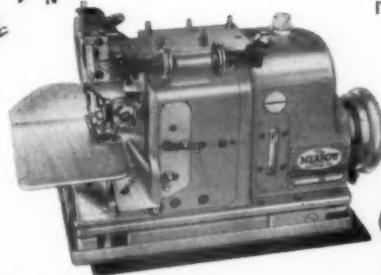
**IF YOU'RE ON BULKY WORK . . . OR LIKELY TO BE . . .  
CAN YOUR MACHINES HANDLE IT EFFICIENTLY?**

If not,  
You Need



# MERROW CLASS M MACHINES

- Handling of material is easier . . . there's no need to force work through machines.
- Faster speeds (up to 5,500 stitches per minute) mean more output.
- Automatic lubrication assures maximum production with minimum "down time".



Contact your Merrow representative or write direct.



2824 LAUREL ST. • HARTFORD, CONN. • U.S.A.

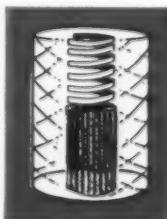


If your cones are not properly wound; if your yarn is not properly softened, you lose money at the knitting machine.

With a half century of experience in serving the knitting industry, with unequalled yarn dyeing and winding capacity, and with a superior technical staff, we can assure you of properly wound cones and of yarns softened with our special knitting finish.

And don't overlook the quality of Franklin Dyeing. Wound on Franklin Springs exclusively, our dye packages are compressible. Soft packages compress more and hard packages compress less into a column of uniform density. Uniform penetration of dye liquor and uniform shades consistently follow.

Our representative is at your service. Contact our nearest plant or office and ask him to call.



X-ray view of Franklin Package—the "secret" of uniform shades. Don't say "package dyed". Say...  
"FRANKLIN COLORBRED"

*Franklin Process*  
COMPANY

Largest Package Dyers in the World of Natural and  
Synthetic Fibre Spun Yarns

DIVISION OF INDIAN HEAD MILLS, INC.

Greenville • Chattanooga • Fincastle, S. C.

Philadelphia Office — Howard & Clearfield Streets

New York Office — 111 West 40th Street

Providence Office — 611 Turks Head Building

349-0

the raw wool yarn be very in the raw comparisons with quotations relatively so gradual year price.

The raw wool price reduction in knitting the past year has fallen in 5¢ from though risen. The ton is the absence demand for particularly supplies low side ment for likely to sure on

RE

Worsted  
2/20s  
2/30s  
Acrylic  
2/20s  
2/20s  
2/20s  
One-ply  
1/26s  
1/30s  
Tu  
Pac  
Spu  
1/30s

\*Prior to

On Co

GASTON

the raw wool stage, the price of wool yarn would be expected to be very sensitive to fluctuations in the raw wool market. Yet a comparison of wool yarn quotations with various acrylic yarn quotations makes wool look relatively stable. This followed a gradual erosion of synthetic yarn prices since earlier in the year.

The recent cut in acrylic staple prices has been reflected in reductions of 6¢ to 11¢ a pound in knitting yarn prices during the past two weeks. Wool knitting yarn quotations as published in the trade press are up 5¢ from early spring levels even though raw wool prices have risen. This weak pricing situation is undoubtedly due to the absence of any sustained demand from the knitting trades, particularly sweaters. As spot supplies of raw wool are on the low side, any concerted movement for wool knitting yarns is likely to result in upward pressure on prices (See Table 4).

TABLE 4  
AVERAGE OF TABLE RANGES  
RECENT COMPARATIVE KNITTING YARN PRICES

	Per Pound		
Oct. 9 1961	Sept. 18* 1961	Early Mid-1961	
Worsted			
2/20s quarterblood	\$1.975	1.96	1.925
2/30s zephyr	2.505	2.505	2.475
Acrylic			
2/20s Turbo	1.79	1.855	1.875
2/20s Pacific	1.73	1.83	1.85
2/20s Spun staple	1.575	1.675	1.71
One-ply, various			
1/26s Worsted for jersey	2.205	2.175	2.10
1/30s Acrylic			
Turbo	1.745	1.855	1.875
Pacific	1.70	1.83	1.85
Spun staple	1.565	1.675	1.71
1/30s, 80/20 Acrylic worsted	1.90	1.925	1.95

\*Prior to recent cut in acrylic prices.

## NOW—RAINBOW! A NEW TURBO ORLON

Dyed in Multishades for Special Effects  
On Cones Ready to Knit in Both Regular and Heavy Deniers



51 W. 35 Street, New York 1, N. Y.  
Longacre 4-0460

GASTONIA, N. C.

LOS ANGELES, CAL. PHILA., PA. MONTREAL, CANADA

### Economic Index

#### Fewer Apparel Failures Reported For September

The failure picture in apparel retailing brightened notably during September as compared with the heavy toll reported in August, according to Credit Clearing House, a division of Dun & Bradstreet, Inc.

In apparel manufacturing, there were fewer failures and lighter liabilities this September than last: 23 failures with liabilities of \$2,285,000 in September 1961 as compared with 33 failures with liabilities of \$3,577,000 in September 1960. However, the totals for the first nine months of the two years show this leading both in numbers and in aggregate liabilities of failing manufacturers, 360 with liabilities of more than 34 million in 1961 compared with 313 with liabilities of about 27 million in 1960.

## MAKE AINSLIE

### YOUR HEADQUARTERS FOR FINEST QUALITY KNITTING MACHINE PARTS AND SUPPLIES

Needles & Springs  
Fast . . . Fast . . .  
Fast . . . delivery of  
special orders

Feeders—C&F,  
Diamant, Walter,  
Ainslie, Grosser, etc.

Cams—C&F, Diamant,  
Walter, Ainslie, etc.

Brush wire—Ainslie  
Special Wire for  
Better Brushing

Springs, porcelains,  
flat brushes, take-up  
tape

Knitting Machine  
Links, Rivets,  
and Chain



Write for our FREE illustrated  
catalog for full information and  
Hints on Brushing and Knitting.

### AINSЛИE KNITTING MACHINE CO.

750 Grand Street EVergreen 7-3497 Brooklyn 11, N. Y.

*Increase Production . . .*

*Reduce Cost . . .*

*See it done with the . . .*

An extremely accurate machine  
for cutting cottons, woolens  
and all synthetics, sweaters and  
all knitted and woven material.

**BANDKNIFE  
CLOTH  
CUTTING  
MACHINE**

- Fast, Quiet, Vibration Free
- Easily Operated by Unskilled Help
- Maximum Safety Features Built In
- Minimum Maintenance
- Will Also Slice Cloth on Rolls



**MONTROSE**  
SUPPLY & EQUIPMENT CO.  
div. of Montrose Oil & Belting Co., Inc.

71 W. 6th St., Brooklyn 11, N. Y. STagg 2-7929

# INTERSTATE

yarn mills, inc.

5725 HUDSON BOULEVARD  
NORTH BERGEN, N. J.  
N. Y. Phone: LO 4-7120  
N. J. Phone: UN 5-3116

- COLLARS
- CUFFS
- BOTTOMS
- SLEEVES
- ELASTICS
- BORDERS



**CAPITAL**

KNITTING MILLS of Phila., Inc.  
Westmoreland & Collins Street  
Phila. 34, Pa. GARFIELD 3-0376

**KNIT RIMS**  
Satisfaction  
Guaranteed

## SHAWMUT, INC.

129 Porter St., Stoughton, Mass.

### Commission Laminating

**EXPERIENCE** — to do the best job efficiently and promptly

**CAPACITY** — to handle all your needs swiftly, guided by your specifications

**DEPENDABILITY** — licensed to use the Curon® patented heat laminating process and the Curon® tag (when applicable)

Sample fabrics processed promptly —  
For complete details call, write, wire —

## ROBISON PROCESSING CO.

div. of Shawmut, Inc.

130 West 34 St., New York, N. Y.  
LAckawanna 4-0086

Box 537, Pawtucket, R. I.  
PAwtucket 5-1700

## Jantzen Features Wool, Fur Blends, Angora, Mohair

(Continued from Page 21)

new look by exhibiting a definite contrast.

Necklines are generally very relaxed. Ties at neck or waistline have a loosely tied air. The canoe neckline is wider than a crew neck and has a small rib edging. The Jackie neck — also wider than the traditional crew — is a shallow, gently ovalized scoop that lies flat on the neckline.

Asymmetrically placed ties and other off-center neck detailing acknowledge this trend in several styles.

Provocative contrast for Jantzen's sportswear in wool and other fabrics are the buttons — which this year follow two opposite trends, either very large or very miniature. Buttons are non-chip and non-tarnish. Ball shapes and egg shapes are found. There are crocheted buttons, to go with a hand-crocheted trim, and there are dull wood buttons with a varnish finish to prevent chipping.

Fur blends in the Jantzen line mix lamb's wool with 25 per cent angora and sometimes add nylon, for sweaters that offer a wide choice of necklines with many interesting dressmaker details. A slim knit skirt in fur blend matches some of these tops for a two-piece dress look. The skirt is on a Helanca waistline over elastic.

Mohair has many aspects. In sweaters, it appears in loop fabrics, in frosted two-tone mixtures of wool-and-mohair, and in mohair froth of 80 per cent mohair and 20 per cent nylon, worsted spun. Colors are lush; and there are delightful plaids, as well as solids, in go-with skirts and tapers. In woven fabrics, the mohair fabrics drip down the edges of stripes and outline plaids with fetching textural effect.

Angora fluff mixes angora and lamb's wool, sometimes with the addition of nylon. Unusual elements are narrow cabling down the front of a cardigan and, in a pullover, an interesting irregular stripe pattern in two colors — some in con-

trast combinations, others in two-tone relationships.

There are numerous all-wool bulkies with the handknit look—adaptations of European winter resort styles. Many make lavish use of cabling. One appealing zipper cardigan giant purl has two intertwined cables in a border surrounding the neck and extending completely down the fronts.

Virtually all groups in the sweater line have at least one dress in addition to the two-piece effects available through color-matched separates.

A number of these are sleeveless. Some two-pieces provide an overblouse effect. One-piece dresses show many blouson effects, and some sheaths are included. There are tweeds, angora, mohairs, a hearts-and-flowers print on flta knit.

## Several Fibers For Double Knits

(Continued from Page 15) readily adaptable to double knits. Knitters have used these yarns in dress and suiting fabrics as well as in swimwear cloth; in the latter, with or without covered rubber.

The textured filament yarns may be the Ban-Lon crimped type, those produced on the false twist principle such as Helanca, Fluslon, and Saaba or the Agilon type of texturized yarn.

Common yarn sizes in these texturized yarns are 70/2 or 100/2. Either size may be knitted on 16 or 18 cut double knit equipment.

Fabric yield will depend not on the relationship of yarn size to machine cut but on the finishing technique employed. Fabrics come out of the relaxation weighing from 10 to 11½ ounces. In subsequent finishing however, the weight can be adjusted in a range of from 9½ to 11½ ounces.

## Cotton

### Talk On Price Supports

James E. Robison, president of Indian Head Mills, will discuss the effects of the cotton price support program on the textile industry at the annual fall luncheon of the Textile Salesmen's Association, October 26 at the Statler-Hilton.

Circ  
Cloth  
(Conti

cotton, w  
dresses, to  
no means  
branch of  
always sh  
type of n  
has never  
tion, has a  
reputation  
and longev  
a basic n  
Knitted ou

**Double**  
Double jo  
most abus  
ican outer  
At its bes  
even before  
into the l  
not be ade  
it means d  
ferent peo  
refrained  
convention  
this cate  
jersey" is  
American  
refuses to  
old equip  
commonly  
term refer  
first and f  
—produced  
between 1  
cordingly,  
qualify to  
however, a  
in 16 cut,  
right to e  
gory.

The int  
fabrics a  
back not  
years, but  
on knitt  
now that  
at least in  
practically  
jersey mod  
man, Swi  
fancy, ha  
this coun  
There se  
cussing th  
text. It ma  
to the sub  
on double  
locally.

Apart f  
there are  
wheel dou  
ffered at p  
feed mode  
which ma

## Circular Knitted Cloth Technology

(Continued from Page 32)

cotton, wool and blends for dresses, tops, trousers and, by no means least, in the swimwear branch of the industry which has always shown partiality to this type of machine. The machine has never gone out of production, has attained a widely held reputation for both its reliability and longevity, and is accepted as a basic model in many local knitted outerwear mills.

### Double Jersey Equipment

Double jersey is probably the most abused form among American outerwear knitters today. At its best and most lucid, and even before it had been imported into the U.S., the term could not be adequately defined. Now it means different things to different people. I have purposely refrained from including the conventional PR machine in this category, because "double jersey" is a new term to the American knitter and he usually refuses to reconcile it with his old equipment. As it is most commonly used at present, the term refers to constructions — first and foremost, double pique — produced on machine cuts of between 16 and 20 n.p.i. Accordingly, the old PR does not qualify to be included. There is however, a later PR model, built in 16 cut, which no one has the right to exclude from this category.

The interest in double jersey fabrics and equipment dates back not much more than two years, but it has got such a hold on knitters' imaginations by now that it has to be dealt with at least in some detail. By now, practically every foreign double jersey model, be it British, German, Swiss or French, plain or fancy, has been imported into this country in some numbers. There seems little point in discussing these in the present context. It may prove more suitable to the subject at hand to dwell on double jersey machines built locally.

Apart from the PR machine, there are two more local pattern wheel double jersey models offered at present. One is a 36-feed model, the other a 48-feed which made its debut at Atlantic

City last May. There can be no doubt that this is the most promising branch of outerwear knitting open to the American producer at the present time, but there is little the European knitter can learn from him for the time being. At least for a year or so, it must be assumed that developments here will parallel, say, the developments that took place in the British double jersey section in its third or fourth year of existence.

One thing should be borne in mind, however, and that is the inherent capacity of the American manufacturer to catch up rather rapidly with a development when he puts his mind to it. Local producers have already shown considerable originality in adapting double jersey techniques to their own particular needs, and as they get better acquainted with the various technicalities involved, they will certainly add to the general store of knowledge and experience already existing in this field abroad. In the meantime, they seem all too ready to learn what they can as fast as they can.

In conclusion, I would like to leave the subject of knitting machinery and devote a little time to the important subjects of yarn length and speed measurements, and the progress made in regard to positive yarn feed by American knitters.

The HATRA Yarn Speed Meter has been available in the U.S. for almost five years now — in fact, I believe it was imported subsequent to the last International Knitting Machinery Exhibition at Leicester in 1956. In addition, there is a yarn speed gauge produced locally under the trade name Stitch-O-Meter and distributed through one of the leading machine builders. This instrument has gained very wide acceptance among American knitters. It is of such obvious value, especially on multi-feed machines, that hardly any resistance is encountered from the operators to its introduction into the mill, and already it is considered indispensable in many places.

There is a locally produced length meter available for use on revolving cambox machines. This, too, is very popular insofar that many mills possess it, but I believe it does not get the

(Continued on Page 87)

*Union Special* **LEWIS**



STYLE 150-1

— the finest built . . . finest operating

**BLINDSTITCH  
MACHINE**



for ALL knitted garments

- fells armholes
- hems bottoms
- fells necks

The PROVEN

machine for knitwear

TRY the Lewis in your plant

SEE YOUR REGULAR LEWIS AGENT



FINEST QUALITY

*Union Special* MACHINE COMPANY

315 West 35th Street • New York 1 • CHICKERING 4-8800

## BILL GLOVER — AUTOMATIC WASHER-EXTRACTOR

SAVES 70% OF LABOR COSTS!

CUTS PROCESSING TIME

FROM 45 TO 15 MINUTES PER LOAD

Bill Glover processing techniques are your assurance of exact sizes after delivery.

This scientific, simple but rugged washer-extractor holds each load automatically to precision controls during the entire processing operation. Small wonder — each successive load is uniform in color, texture and finish. No more distortion of fabrics or variations in sizes and finish.

You, too, can ship with confidence.

WRITE FOR  
THE FACTS TODAY!



*Bill Glover, Inc.*

5204 Truman Road, Kansas City 27, Mo.

NAME ..... TITLE .....  
COMPANY .....  
ADDRESS .....  
CITY ..... ZONE.... STATE.....  
 Send Literature     Have Representative Call



By Jernat Sportswear, division of Hecht and Biern.

\*Reg. T. M. of Chemstrand

CHEMSTRAND CORPORATION MAKES ACRILAN<sup>®</sup> ACRYLIC FIBER AND CHEMSTRAND<sup>®</sup> NYLON • GENERAL SALES OFFICES: 350 FIFTH AVENUE, NEW YORK 1, N. Y. • DISTRICT SALES OFFICES: New York 1; Akron, Ohio; Charlotte, N. C. • Canadian Agency: Fawcett & Co., Toronto, Canada

Chemstrand makes only the fiber; America's finest mills and manufacturers do the rest.

**A**  
ACRILAN  
acrylic fiber  
**CHEMSTRAND**

same dail  
ment gets  
draw the  
ment. Th  
when one  
which the  
in compa  
meter, wh  
each ind  
running th  
ber of re  
and attac  
etc.

Trend  
An in

(Cont  
drug on th  
all spot s  
up and a  
is likely  
crop for  
able. We  
active in  
this year  
direction.

Like c  
from Iran  
knitting i  
Outer M  
ing cam  
more car  
not comb  
adds to  
the last  
greater i  
the knitt

Like a  
fur fiber  
knitters. S  
usually n  
at prices  
per pound  
and racco  
for knitti  
taken up  
at prices  
for musk  
for racco  
degree of

Perha  
ment late  
the exten  
may now  
fur. Sizea  
rently go  
usage i  
warmers  
amounts.  
three or  
95¢ to  
fineness,

Amo  
lamb doe  
so active  
although  
ter grade  
blends.  
a knitting  
sive syn

same daily use the other instrument gets and does not usually draw the same enthusiastic comment. This is hardly surprising when one considers the ease with which the speed meter is used in comparison to the length meter, which involves setting at each individual feed in turn, running the machine for a number of revolutions, disengaging and attaching to the next feed, etc.

## Trend Toward Luxury Animal Fibers

(Continued from Page 7)

drug on the market. This season all spot stocks have been taken up and a tight supply situation is likely to exist until the fall crop for 1962 becomes available. Weavers have been very active in camel hair and most of this year supply has gone in that direction.

Like cashmere, camel hair from Iran is too coarse and for knitting must be acquired from Outer Mongolian sources. Knitting camel hair must also be more carefully de-haired as it is not combed like cashmere. This adds to the cost, nevertheless, the last two years have seen greater interest in this fiber by the knitting industry.

Like angora, mink is another fur fiber of especial interest to knitters. Supplies are limited and usually move in 200 pound lots at prices in the vicinity of \$2.50 per pound, as against muskrat and raccoon, but frequently used for knitting which sometimes are taken up 5,000 pounds at a time at prices ranging around \$1.75 for muskrat and \$1.85 to \$2.75 for raccoon, depending upon the degree of refinement.

Perhaps the biggest development lately in fur fibers has been the extended use of rabbit which may now legally be described as fur. Sizeable quantities are currently going into blends and its usage in bonnets and earwarmers has absorbed limited amounts. Prices within the past three or four years vary from 95¢ to \$4.50 depending upon fineness, quality and shade.

Among the wool specialties, lamb does not seem to have been so active in the last few years, although good quantities of better grades have been going into blends. This is also exclusively a knitting fiber but the inexpensive synthetics are cutting into

the demand on one hand, while a trend toward worsted type sweaters and regular wools are competing on the other hand.

At this time, good quantities are available and prices would not appear to be an obstacle. Most of the knitting interest is in the clips ranging around 75¢ to 95¢ in price and in broken top currently valued about \$1.55. Lamb's wool prices tend toward stability.

Shetland does not appear to be at all in demand domestically and we are not stocking it but we have former contacts with whom to open negotiations should requests arise. Neither are we currently stocking Welsh mountain wool, or the crisp Icelandic wool, which is soft and fleecy but has a resiliency like Norwegian wool. In lots of these types which turned up abroad other types were found mixed in and we decided against handling it although we might be interested in genuine clips offered by the official Iceland cooperative merchandising organization at marketable prices should real demand develop here.

## Scandinavian Flavor In Jer-Sea Swimwear

(Continued from Page 43)  
range of \$10.75 to \$12.75 with only one, very high style number at \$22.75.

Rounding out Jer-Sea's line is a collection of high style suits. The most elegant fabric is glittery metallic knit. Three one-piece suits and a single bikini are offered in the lame knit which comes in black, taupe, red and purple. One style is a scoop neck and back maillot with the high cut leg, another, a V-neck maillot with sashed waist, and the third is a high fashion maillot with slight scoop neckline and sleeves.

Others in the high fashion grouping utilize new silhouettes with many of the fabrics previously described. A maillot with high neck and backline interlaced in the Scandinavian jacquard is one. A high front, low back solid white model with sashed waist is another. Zebra and leopard prints are still another part of this group. Necklines on these maillots are a tie and an unusual, away from the neck halter. These animal prints come in bikinis.



**THE "RELIABLE FELLOW" SAYS:**

**REMEMBER**  
**TO CALL**  
**RELIABLE**

40/3 Sewing Thread . . .  
Nylon Sewing Thread . . .  
Nylon Separating Thread . . .  
Dacron Separating Thread . . .  
Soft & Merc. Kit. Cotton . . .  
Kismet—Seam Binding . . .  
Pintucks . . .  
Labels—Tags . . .  
Elastic—Cleaning Fluid . . .  
Paper—Twine . . .  
Wax . . .  
Pressing & Cutting Supplies . . .

330-32 Bleecker St., B'klyn 37, N.Y. Glenmore 6-4434-4435

# CALL US AT PENNELL

FOR TOP PRICES ON MEN'S AND BOYS'

- SWEATERS
- SWIM TRUNKS
- POLO SHIRTS
- WALK SHORTS

WE'RE ALWAYS OPEN TO BUY . . . WE ALWAYS BUY FAIR!

Pennell Sportswear Co., 1384 Broadway, New York 18 • LA 4-9020



## Now . . . Cut Costs and Step-up Production with these EFFICIENCY Labor-Saving Devices

### "SWEATER PRESSING ATTACHMENT"

Check these exclusive advantages:

- Speeds up frame pressing
- Eliminates handling of pressing frames
- Can be adjusted to overcome pressure marks on Orion sweaters
- No installation required

### "PRESSING FRAMES"

for better-looking and accurately sized FULL FASHIONED and cut-and-sewn sweaters and knitted skirts.

### SKYLINE STEAM SIZING ATTACHMENT\*

for faster production and more uniform steaming of circular knit sections.

. . . and Sateen and Nylon Steam table covers and pads . . . OHAUS textile scales . . . Steam Tables and Pressing Machines.



## EFFICIENCY DEVICES

262 Greene Ave., Bklyn. 38, N.Y. NEvins 8-6984



**KNITTING MILL FOR RENT**

With all electrical, and pressing equipment.  
In the heart of Ridgewood.

**BOX 444**

**WANTED**

Steam table, 30" x 60". Call Mr. Miller at:

**UNION 5-2600 (N.J.) or LO 4-1375 (N.Y.)**

**FOR SALE**

4—9 gauge, Queens Tandem Head machines, 48" beds.

**Call UNION 7-1068 in New Jersey**

**WANTED—KNITTER MECHANIC**

Full fashioned sweater machines.  
Excellent position — Oakland, Md.

Contact: MAC M. ROTHKOPF  
317 Bushwick Ave. Brooklyn 6, N. Y. HYacinth 7-1486

**WANTED**

Schweiter winding machine from skein to cone.

**BOX 448**

**FOR SALE — CASH OR TERMS**

- 1—Supreme BRW, 4 cut, 372 N., 9 stripers.
- 2—Textile F.F. machines, 12 section, 24 gauge, 31½".
- 1—Textile F.F. machine, 20 sections, 20", sleeves, 24" gauge, all 3 have 3 color stripers and filler points.
- 1—160-2, Lewis label tacker, with standard motor.
- 2—Jacquard TJI, 30", 12 & 13¼ cut, 12 feed, 4 color stripers.
- 1—Jacquard AI, 30", 32 feed, 13½ cut.
- 10—Jacquard body size TA, 10 cut, 4 color stripers, 12" to 18".
- 4—Jacquard LH, 30", 7 & 8 cut, 6 feed with stripers.
- 2—Jacquard card punching machines, 1-44; 1-70 lever.
- 1—Columbia dry cleaning machine, model G.
- 1—Stoll, 10-cut border machine.
- 1—Stein separating machine.
- 2—Jacquard TAI, 30", 6-cut, 12 feed, 12 stripers.
- 1—Brinton, 18", 14-cut, 24 feed, 792 needles.
- 10—Grosser, fully automatic machines, American chain: 1-20", 60 N., 1-20", 70 N., 1-22", 77 N., 2-26", 65 N., 1-28", 70 N., 1-32", 80 N., 1-32", 96 N., 1-40", 100 N., 1-19", 50 N., and 1-36", 90 N. Dubied.
- 2—Universals, 63", 4-cut—over 21,000 (serial no.).
- 1—Wildman PB2, 19", 10 cut, with motor attached.
- 1—Dubied VD, 44", 10-cut, Hi-Low butt needles.
- 2—Kastrinsky calendars, 54" and 60".
- 2—Jacquard 1-TA; 1-TAI, 30", 10-cut, 12 feed.
- 1—Jacquard LA, 15", 8 cut, 372 needles.
- 1—S & H, 30", PA, 8 feed, 7 cut.
- 4—Grosser, 2½ cut, hand machines: 2-20", 1-24", 1-26".

**BEN WACHSMAN & CO.**

Consultant for Appraisals and Liquidations

671 Bushwick Ave., Brooklyn 21, N.Y. GL 2-4936

**KNITTING MILL FOR SALE**

Must sell fully equipped mill due to ill health of one of the principals. Partnership or full ownership.

Reply in confidence.

**BOX 440**

**FOR SALE**

2—4 cut LHB circular Jacquard. Serial number 6038 and 6039.

**Call EMPIRE 6-2734**

**WANTED**

Interested in purchasing small full-fashion knitting mill in middle atlantic states, prefer one in operation or ready to run.

**BOX 392**

**WANTED**

Supreme S.A.A.F. machine, 26" diameter, 18 cut.

**BOX 422**

**WANTED**

21 gauge, full fashioned sweater body machine. Please state sections, width of heads, automatic or non-automatic, also price.

**BOX 447**

**WANTED**

Supreme or Brinton 22 cut, 20" cylinders, in good condition.

**BOX 440M**

**YARNS WANTED, FOR SALE**

**WE BUY**

**AND SELL**

**ALL TYPES OF KNITTING YARNS**

**WORSTED — ZEPHYR — ORLON**

**COTTON — OTHER SYNTHETICS & BLENDS**

**LEHIGH YARN**

Co. 2601 N. HOWARD ST.  
PHILA. 33, PA.  
REGENT 9-5457

**WANTED FOR CASH** Worsted - Zephyrs - Synthetics - Cotton

We always carry a large stock of yarns, dyed on cones for immediate use.

**CALL EV 8-8277**

**BEN BALIF**

686 Flushing Ave.

Brooklyn 6, N. Y.

**CENTURY  
YARN CO.**

**YARNS  
BOUGHT AND SOLD**

**SAM SASKEN**

1441 Broadway, New York 18, N.Y.  
CH 4-8733

**YARNS FOR SALE**

Very Reasonably Priced to Move Fast  
550 lbs.—Masurel Creslan 3/47 Natural—On Skeins  
1100 lbs.—64's Quality Kent French Spun 2/28 Grey  
Heather—On Cones  
550 lbs.—64's Quality Bonte 2/40 Dark Grey Heather  
—On Cones  
3000 lbs.—1/5 Run Wilson Grey Heather Fur Blend  
Write BOX 449 or Call LONgacre 3-2691

**WE BUY SURPLUS KNITTING YARN**

Machine and Hand Knitting Sizes  
**WALTER McCOOK & SON, INC.**  
711 Arch St. Phila. 6, Pa. WALnut 5-8891

**FOR SALE  
ELASTIC YARN FOR KNITTING**

- All Sizes and Colors

**BEDFORD YARN CO.**  
79 Clifton Place  
Brooklyn, N.Y.  
MAin 2-1340

**METALLIC YARN WANTED**

1/64 to 1/128 width. Supported or unsupported.  
Kindly enclose small reeling.

**BOX 405**

REAL ESTATE

**BUILDING FOR LEASE OR SALE**

in upper Manhattan. 10,000 sq. ft. on main floor, 7500 sq. ft. in basement. Sprinkler system. All electrical equipment for a knitting mill.

**BOX 440K**

**CONTRACT WORK, CONTRACTORS WANTED**

**KNITTING CONTRACTOR WANTED**

with Supreme or PR machines, 14 cut pattern wheels, to knit worsted and metallic yarns.

**BOX 440BB**

**COMMISSION SPINNING WANTED  
WOOLEN SYSTEM**

Any fibers, any blends, any size, any quantity. Conscientious work — fast delivery — full cooperation. New England location. Write to

**BOX 420**

**WANTED**

Prominent jobber, highly rated, interested in making 10,000 ladies' Ban-Lon cardigans and slipons, pussycat label. Labor must be cheap. January, February and March delivery. Yarn on hand. Write:

**BOX 420C**

**WINDING WANTED**

Aggressive and reliable yarn winding concern with large capacity in the New York area is interested in representing spinner or dyer.

**BOX 440Z**

**CONTRACTORS WANTED**

on 7 gauge flat Links and circulars for bulky girls' sweaters.

**BOX 440A**

**FINISHING WANTED**

Suppliers of nationally advertised company has additional capacity for finishing of any type of bulky knitwear.

Prompt knit delivery.

**BOX 442**

**CONTRACT WORK WANTED**

for ladies' and men's bulky sweaters on 4 & 5 gauge machines. Top quality workmanship. Reasonable.

**BOX 420F**

**CONTRACT WORK WANTED**

on ladies' sweaters. Ban-Lon—Philip 33" machine. Bulkies — Universal and Stoll 4 cut machines.

**BOX 440P**

**CONTRACTORS WANTED**

for novelty stitch front (interlock back) Ban-lon shirts. Complete garments or knitting of fronts only.

**BOX 440R**

**CONTRACTOR WANTED**

with 2½-3 cut hand & power machine. 6-9 cut links, 10 cut flat, 12-14 cut circular; in every gauge of TAI, TGI and full fashioned machines.

**BOX 440T**

**CONTRACT WORK WANTED**

knitting only on 4 cut flat machines producing bulky knit sweaters. Prompt delivery, quality workmanship.

**BOX 440J**

HELP WANTED

**KNITTING DEPT. SUPERVISOR WANTED**

Experienced man wanted to supervise knitting department of sweater mill with national distribution. Must be familiar with production scheduling for knitting machines, quality control and yarn handling. Permanent position and excellent future for qualified man. Reply giving resume of experience and earnings.

**BOX 420E**

**WANTED—SEWING ROOM SUPERVISOR**

Thoroughly experienced in every phase of operations pertaining to manufacturing sweaters or sportswear and capable of training operators, for one of the largest mills in the Philadelphia area. For an expert in this field who is willing to relocate in Philadelphia we offer an excellent position. Please state all your qualifications and background in your first letter.

**BOX 440X**

**ASSISTANT PRODUCTION FOREMAN WANTED**

Must be able to coordinate production, keep production records, and do quality control work in LARGE SWEATER MILL.

**BOX 440H**

**WANTED**

Foreman for Full Fashioned sweater manufacturer. Must understand all phases of production from knitting to pressing and be able to instruct on all machines. Write or phone:

**BRISTOL KNITTING MILLS**  
951 Broadway, Fall River, Mass. OS 4-3531

**KNIT FABRICS DESIGNER WANTED**

Top converter wishes to employ first rate designer to style line of worsted, novelty & cotton knits. Suitable for the dress, sportswear & coordinate trades. Must have knowledge of Supreme sinker top knitting machines and pattern field layout. Please write giving full particulars as to background and experience. All replies held in strictest confidence. Our employees know about this ad.

**BOX 440Q**

**WANTED**

Finishing Foreman for Cut and Sewn Sweater Department. Must be able to teach on all types of finishing machines.

Write or phone:

**BRISTOL KNITTING MILLS**  
951 Broadway, Fall River, Mass. OS 4-3531

**KNITTER MECHANIC WANTED**

Thoroughly experienced on LH, flat machines. Permanent position with good opportunity for right man. Please do not apply if not fully capable of taking charge.

**BOX 428**

**WANTED**

Looping Machine Mechanic experienced on Southern Textile Looping Machines.

**SUBURBAN KNITTING MILL**  
5805 Park Rd. W. Hollywood, Fla.

**KNITTING FOREMAN-MECHNIC  
WILDMAN P.B. 2 MACHINES**

Only thoroughly experienced man will be considered. Work in New York City plant.

Write Box 167, Realservice Advtg., 110 W. 34th St., N. Y.

**WANTED**

56 Lever punch Press  
for TJI machine.

**MAC M. ROTHKOPF**  
317 Bushwick Ave. Brooklyn 6, N. Y. HYacinth 7-1486

**MECHANIC WANTED**

familiar with Wildman Spring Needle machines.

**BOX 440F**

**POSITIONS WANTED****PRODUCTION MAN-STYLIST AVAILABLE**

with thorough knowledge of cost, yarn, quality control, styling and pattern making.

**BOX 340R**

**KNITTER MECHANIC AVAILABLE**

Thoroughly experienced on all types of Supreme equipment. Desires position in the South.

**BOX 440G**

**WANTED—YARN MAN**

Large Phila. sweater mill has opening for person with considerable experience in controlling large yarn department. Must have extensive knowledge of all types of yarn. Permanent position. Fringe benefits. Must give complete details in first letter. Replies in confidence.

**BOX 440W**

**HAVE BRAINS, WILL INVEST**

CAPABLE knit goods manufacturing consultant (M.E., T.E., I.E.) will invest his services plus substantial capital in mill that promises growth where his brains and ability are put to work (or will buy outright).

**BOX 440N**

**BUSINESS OPPORTUNITIES****KNITTING MILLS, JOBBERS & SPORTSWEAR MFGS.**

who are interested in combining their companies for increasing their individual growth capacity & looking toward a public stock offering write in confidence for a discussion.

**BOX 440S**

**WANTED****Experienced Partner or Well Established Jobber.**

Fifty per cent interest available in diversified mill producing ladies' sweaters. Production 1,000 dozen per week. Mill is presently in full operation.

**BOX 443**

**SALESMAN PARTNER WANTED**

Willing to invest in good knitwear business. Small investment.

**BOX 446**

**SERVICES, SUPPLIES FOR SALE****CLEANING FLUID FOR SPRAY GUNS**

Scientifically compounded. Good for Ban-Ion and Orlon. Safe and rapid in cleaning stains. Special fluid for wool and other fabrics.

**Satisfaction guaranteed.**

**MASTER STAIN REMOVER**

68-56 Dartmouth St., Forest Hills 75, N.Y.

Tel: Ligette 4-0898

**TRADE WANTS**

RATES: one insertion—35 cents per word. Words set completely in capitals — 40 cents per word. Box numbers count as two words. Minimum cost of advertisement—\$5.50. Minimum cost of Positions Wanted advertisements — \$5.00. Trade Wants for Monday's paper must be in by preceding Wednesday, 2 P.M. Please enclose payment with your order.

Knitting mill for sale. 17 cut, 30" Philip machine and complete finishing plant. Box 420R

Contract work wanted. Finishing only, on all types of sweaters. Good workmanship. Phone: STAgg 2-5049

Finishing wanted on all types of knit goods; men's, ladies', & children's garments. Call EVergreen 7-6707

POSITION WANTED: FOREMAN, FINISHING DEPARTMENT, BULKIES, NEW YORK AREA. WOULD CONSIDER CALIFORNIA. BOX 440B

Contractor wanted on 6, 7 gauge circular Links machines, fine workmanship desired. Box 440C

Available: Tubular Knit Products Manager. 15 years experience in Knitting, winding, receiving, shipping, inventory and quality control of yarns and fabrics. Box 440D

FOR SALE: 4—WILDMAN PB RIB STRIPERS 19", 20", 21", 22" and 10 CUT. EXCELLENT CONDITION. BOX 420M

Contract work wanted, LHDS machines, new machines for large bulkies. Box 440E

For sale: Dubied, 7 gauge, Hi Low, flat power also, finishing plant in running condition. Box 440AA

**SAM STARK specializing in  
CREATIVE JACQUARD DESIGNS**

60 Clarkson Ave., Brooklyn 26, N.Y. IN 9-8554 Aft. 3 P.M.

**REPRESENTATIVES, LINES WANTED****SALES REPRESENTATIVE WANTED**

Importer of men's Italian knit shirts desires a selling agent with following of department, better specialty and chain store buyers. Several territories open. Reply stating full particulars in first letter. All replies confidential.

**BOX 440V**

**CLOSE-OUTS WANTED**

**CLOSE-OUTS WANTED**  
CASH PAID for surplus stocks of Sweaters and Bathing Suits  
**BERNETTE TEXTILE COMPANY**  
101 W. 31 St., New York City  
BRyant 9-5526-7

**\$\$ CASH PAID FOR CLOSEOUTS \$\$  
SWEATERS — POLO SHIRTS — SPORTSWEAR**

Men's, Boys'  
Girls', Ladies'  
CALL US FIRST!  
**ARNA KNITWEAR, INC.**  
1265 B'way, N.Y. 1, N.Y. OR 9-1677

**CONTRACT WORK WANTED**

on 4 cut Universals. Complete garment. Best craftsmanship and very reasonable price.

**Call EV 7-4384 or write BOX 440CC**

"SM" IS  
Over the  
country's  
tribution

"SM" IS  
The major  
buyers v  
suggesti

Ansonia  
Agen...  
Willia...  
Armet...  
Beauti...  
Agen...  
Brilliar...  
Agen...  
Adve...  
Catalin...  
Comma...  
Agen...  
Adve...  
Curtis...  
Agen...  
Darlen...  
Agen...  
Adve...

1 Page  
2 Page  
4 Page  
2nd &  
Cover  
(inclu...  
stand...  
blue)  
4th Co...  
(inclu...  
stand...  
blue)

# 1962 EDITION...

Our 17th Annual...

## COMING... JANUARY 10th

THE FIRST . . . AND STILL THE ONLY  
"VOICE OF SWIMWEAR AUTHORITY!"

**Published As A Specialized Information  
Service For Swimwear  
Buyers & Merchandisers**

A PRIME ADVERTISING MEDIUM FOR  
SWIMWEAR GARMENT PRODUCERS,  
WOVEN AND KNIT FABRIC MFRS.  
AND BEACHWEAR SUPPLIERS

### "SM" IS READ BY SWIMWEAR PEOPLE ONLY . . . NO WASTE CIRCULATION!

Over the years, we've built up the very best list of retail swimwear buyers—in the country's major dept., specialty and chain stores—a scrupulously controlled distribution of 5,000—who sell over \$75,000,000 worth of swimwear.

### "SM" IS EDITED FOR SWIMWEAR PEOPLE ONLY . . . THEY RELY ON IT!

The major editorial emphasis of "SM" is on Sales Training . . . it contains what buyers want—a storehouse of information on styling, fabrics, fitting techniques, suggestive selling, handling adjustments, reducing swimwear returns, etc.

Ansonia Mills, Inc.  
Agency: Mogul,  
Williams & Saylor, Inc.  
Armetex, Inc.  
Beaunit Mills, Inc.  
Agency: Gussow-Hyman  
Brilliant Sportswear, Inc.  
Agency: Manufacturer's  
Advertising Agency  
Catalina, Inc.  
Commar Products Corp.  
Agency: Grant  
Advertising, Inc.  
Curtis, Eddy-Form Co.  
Agency: Francis, Morris  
and Evans  
Darlene Knitwear Co.  
Agency: M. & J. Levine  
Advertising

De Weese, Inc.  
Agency: Advertisers'  
Production Agency  
Edmos Products Corp.  
Fab-Tex, Inc.  
Heathcoat, Inc. (Catalina)  
Agency: Kirk & Brown,  
Inc.  
Heathcoat, Inc. (Rose  
Marie Reid)  
Agency: Kirk & Brown,  
Inc.  
Heberlein Patent Corp.  
Agency: Margaret Macy  
Advertising  
Jantzen, Inc.  
Agency: Hockaday  
Association, Inc.  
Kleinert, I. B., Rubber Co.  
Agency: Grey  
Advertising Agency

Lawson Products, Inc.  
Agency: George T.  
Metcalfe Co.  
Marina Del Mar  
Agency: Anderson-  
McConnell Advertising  
Agency, Inc.  
Multex Company, The  
Pandora Swimwear  
Agency: Harriet Romain  
Advertising, Inc.  
P. and M. Distributors  
Rayflex Fabrics, Inc.  
Regal Knitwear Co., Inc.  
Agency: Altman-Stoller  
Advertising, Inc.  
Robby Len  
Agency: Lester  
Harrison, Inc.

Rosenstein Brothers  
Agency: Josephson,  
Curfari & Co.  
Sacony, S., Augstein &  
Co., Inc.  
Agency: Claire  
Advertising  
Sea B's, Inc.  
Agency: Charles J.  
Charney & Co., Inc.  
Sea Fashions of  
California, Inc.  
Agency: Charles J.  
Charney & Co., Inc.  
Sinclair Mills, Inc.  
Agency: Jack Posner  
Spielberg, Harry D., Inc.  
United Elastic Corp.  
Agency: The H. L.  
Moore Co.

United States Rubber  
(Footwear-Swim Caps)  
Agency: Fletcher  
Richards, Calkins &  
Holden, Inc.  
United States Rubber  
(Textile Division-  
Lastex)  
Agency: Fletcher  
Richards, Calkins &  
Holden, Inc.  
Warshaw, H., & Sons, Inc.  
Agency: Durand  
Advertising  
White Stag Manufacturing  
Co.  
Agency: Ellington &  
Co., Inc.

### ADVERTISING RATES

1 Page .....	\$250	Color — \$60.00 additional for standard red or blue.
2 Pages .....	465	
4 Pages .....	900	
2nd & 3rd Cover .....	365	Matched Color — \$75.00
(includes bleed and standard red or blue)		
4th Cover .....	495	Bleed page — \$25.00 extra
(includes bleed and standard red or blue)		
		Special position reservation charge — \$25.00 extra.

### MECHANICAL REQUIREMENTS

Space Unit	Width	Depth	Trim size of book
1 Page	5"	7½"	—6" x 8¾"
Double Spread	5½"	7½"	Plates for bleed pages — 6½" x 9"
	(each page)		Halftones — 110 screen. All plates to be blocked.
	or	7½" 11"	
		(plate cut in middle)	

### PUBLICATION INFORMATION

Issuance date: January 10, 1962  
Deadline Space reservations — Dec. 8, 1961  
For Plates—December 14, 1961

**NATIONAL KNITTED  
OUTERWEAR ASSOCIATION**  
(Swimwear Division)

386 Park Ave. South  
New York 16, N. Y.



# WOOL

is still the knitwear industry's  
"FIRST LOVE" fiber... and BANNER is BEST  
for dyeing all types of Wool and  
Specialty Fiber Yarns!

- Acknowledged "Know-How"
- 1,000 lb. Kettle Lots
- Very Large Capacity
- Winding, if desired, in our own plant

4

GREAT NAMES IN KNITTED OUTERWEAR PROCESSING

BANNER YARN DYEING CORPORATION  
BANNERIZED CORP. OF AMERICA  
BANNERLON PROCESSING CORPORATION  
BANNER PIECE DYEING CO., INC.  
488 Morgan Ave., Brooklyn 22, N.Y. • EVERgreen 8-0100

SOON AVAILABLE:  
OUR "EARLY-BIRD FASHION  
COLOR FORECAST — FALL-  
WINTER 1962"—DIRECT FROM  
THE FASHION CENTERS OF  
PARIS AND ROME. ASK US TO  
RESERVE A COPY FOR YOU.

